Equity Valuation – Eurocash SA

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Abstract

Company valuation is a cumbersome endeavor, dependent on different theoretical frameworks and subject to the analysts' subjective interpretations. This dissertation is focused on valuing Eurocash SA, a Polish wholesaler. Thus, providing an illustration of the challenges faced when valuing enterprises. In particular, three different theoretical frameworks, suggested by the most renowned authors in this field of study, were utilized to capture the value of Eurocash. To successfully accomplish such enterprise, state of the art literature was reviewed, in order to present the reasons for the choice of the valuation models. Additionally, and as a supporting evidence of the subjective trait of company valuation, the work here developed was also compared with a research note from Wood Co dated from September 2012.

Resumo

A avaliação de empresas é uma desafio complexo, dependente de diferentes modelos teóricos e sujeito a interpretações subjetivas por parte dos analistas. Esta dissertação está focada na avaliação da Eurocash SA, um grossista Polaco, proporcionando assim uma ilustração dos desafios enfrentados na avaliação de empresas. Em particular, três diferentes modelos teóricos, sugeridos pelos mais conceituados autores neste campo de estudo, foram utilizados para capturar o valor da Eurocash. Para completar com sucesso tal desafio, a mais renomeada literatura foi revista, a fim de apresentar as razões para a escolha dos modelos de avaliação. Adicionalmente, e como prova do traço subjetivo da avaliação de empresas, o trabalho aqui desenvolvido foi também comparado com uma nota de research da WOOD Co datada de setembro de 2012.

Acknowledgments

This dissertation is the culmination of a five year academic cycle at Catholic Lisbon. And although it was a result of my own hard work, there are a set of people that I would like to thank for their help and support on this thesis and along the years. Namely, my family and my friends for their patience and unconditional support, allowing me to pursue my dreams; Mr. Rui Amaral, Eurocash's CEO, for his availability in answering my doubts, making this thesis possible; Professor José Tudela Martins, for his help and precious advices along the development of this thesis; and to all the other wonderful teachers that I had along my experience at Catholic Lisbon for the learning enrichment.

Contents

Introduction

1.1 Objectives

The dissertation thesis hereby presented is an equity valuation applied project of a Polish listed company, Eurocash SA. To successfully complete such venture I propose to:

1. Perform Eurocash SA valuation according to state-of-art literature regarding company valuation with the final purpose of setting a target price;
2. Compare my own findings with the research note of a top investment banking, explaining the differences between the two results;
3. Elaborate a research note similar to what is done by analysts in investment banks.

1.2 Company and Research Note Choice

My choice has hinged on Eurocash SA, a FMCG wholesaler and one of the largest Polish companies, with over two billion euro in sales last year. The reasons for this choice underlie on my interest for Poland and for the retail market.

The Research Note chosen was the one published by Wood Co, being the underlying reason the fact that it was the most recent and the only research note to be issued after the 2012 half year results.

1.3 Dissertation Structure

To successfully achieve the goals and the purpose of this dissertation mentioned previously, I structured this work in five chapters:

1. In chapter 2 different authors and valuation methodologies are revisited, with the purpose of finding the method/s that best apply to the specific case of Eurocash's valuation;
2. In chapter 3 it is presented a macroeconomic overview of Poland; the retail and wholesale market environment, as well as, a full description of Eurocash business and future

strategies; In this chapter it is also presented Eurocash's business fundamentals estimations, essential to build and support the respective equity valuation;

3. Eurocash's valuation is performed in chapter 4, in accordance with the theoretical models chosen under the literature review; moreover, it is also displayed in this chapter a sensitivity analysis, so as to analyze the potential range of values of Eurocash in case predictions fall short or above expectations;
4. In the fifth chapter this dissertation findings are compared with Wood Co's research note. The differences in the business fundamentals and in the valuation methodologies are comprehensively analyzed, to reflect and understand the reasons for the different result;
5. The sixth and last chapter concludes this thesis dissertation, analyzing the findings of this work under the scope of company valuation.

2. Literature Review

2.1 Introduction

"(…) In a market economy, a company's ability to create value for its shareholders and the amount of value it creates are the chief measures by which it is judged"

(Koller, Goedhart & Wessels, 2010)

Value ought to be seen as a key metric of a company's performance, since it relates with the interests of every stakeholder. According to recent researches, a company that aims at maximizing the value to its shareholders is simultaneously: creating sustainable and long lasting employment; improving customer satisfaction and bearing a larger corporate responsibility. Furthermore, focusing on value ensures better resource allocation decisions, as economic, human capital and natural resources have to be better employed, in order to generate a greater value to the company. (Koller, Goedhart & Wessels, 2010)

As stated previously, value is undoubtedly an important measure of performance; however, the reasons to value a company are extensive (Fernández, 2007):

1. **M&A operations**
   - To set a range of values: Buy Side (Highest price to pay) & Sell Side (Lowest price to sell)
2. **Valuing listed companies**
   - Recommend whether to buy, sell or hold the shares by comparing the value obtained with the actual market price.
3. **IPOs**
   - To set a price for Initial Public Offerings.
4. **Compensation schemes based on value creation:**
   - To quantify the value creation by executives in a company or particular business units.
5. **Identification of value drivers**
   - To identify the major drivers of value for the company or business units.
6. **Strategic decisions and planning:**
   - To provide information that facilitates resource allocation decisions.

The purpose of the evaluation developed in this dissertation focuses on the second topic abovementioned. Nevertheless, in order to do such a valuation it is critical to identify the major drivers, as well as, forecast strategic decisions and planning. Thus, it is easy to conclude that the purposes of valuation are not static.

2.2 Valuation Methodologies

To undertake a valuation is not a synonym of a quest for defining the "true" value of a company. A valuation is neither objective nor precise, as all valuations are biased. The only doubts are by "how much" and in which direction. Additionally, complex and intricate models do not necessarily perform better than simpler ones, mainly because they require a larger number of inputs which means higher degrees of subjectivity, and additional "noise" to the models. (Damodaran, 2011)

Currently there are available several models for valuing companies, using different assumptions and methodologies that determine fundamental value, which pose an additional challenge – "which is the right model for a given company?". With the intention of answering this question it is relevant to understand the sources of value of each model and the logical assumptions on which the models are based. (Damodaran 2006)

Even though all models present distinctive characteristics, they do share some common aspects between them, which allow to segment them in different categories (Damodaran, 2006 & Fernández, 2007):

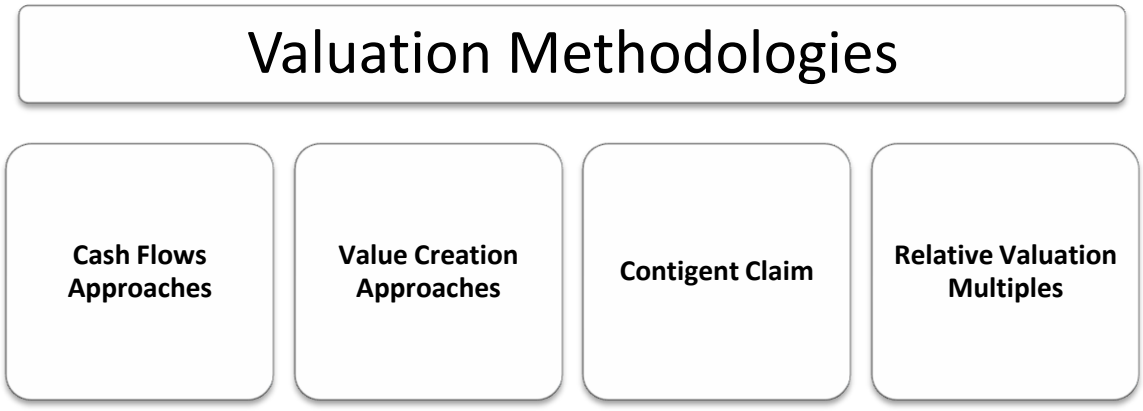


Table 1

In the following pages, these four methods of company valuation are studied in detail, with the purpose of selecting the appropriate model or mix of models that best fit the valuation of Eurocash, taking into account its particular characteristics.

2.2.1 Cash Flow Approaches

These valuation approaches shoulder the value of a company based on future cash flows, discounted at a rate that reflects the riskiness of those cash flows. There is an extensive literature regarding this topic, which is considered by academics as the best theoretical approach towards company valuation (Damodaran, 2006).

Discounted Cash Flows

(Damodaran, 2002)

2.2.1.1 Free Cash Flow to the Firm (FCFF)

FCFF represents the cash flow that is available to distribution to all owners of capital of a company, namely, equity holders, debt holders and other debt mezzanine holders (e.g. convertible securities; preferred shares).

For accounting purposes, FCFF is the net operating profit after taxes, i.e., EBIT after tax, plus all non-cash charges minus capital expenditures and changes in working capital:

$$(1)\ FCFF = NOPAT\ or\ [EBIT\ x\ (1 - T)] + NCC - CAPEX - Changes\ in\ Working\ Capital$$

As it is reasonable, these cash flows have to be independent from the capital structure, therefore any principal payments or receipts from capital holders are not taken into account.

Discounting the expected FCFF at the weighted average cost of capital, which is the average cost of the different sources of capital (Equity, Debt and Mezzanine) weighted by their relevance in the total market value of the company, leads to the value of the whole firm. Lastly, in order to get the value of the company's equity it is required to deduct from the value of the whole company non-equity claims.

$$(2) Equity\ Value = \sum_{t=1}^{n} \frac{FCFF\text{t}}{(1 + WACC)^{\text{t}}} - Non\ Equity\ Claims$$

2.2.1.2 Free Cash Flow to Equity (FCFE)

FCFE, in contrast with FCFF, represents the cash flows that are attributable to the equity holders of an enterprise, that is, the net profit plus all non-cash charges deducted from capital expenditures and changes in working capital and taking into account the changes in debt structure (issue and repayment of debt) (Schweser, K., 2008)

$$(3) FCFE = Net\ Profit + NCC - CAPEX - Changes\ in\ Working\ Capital + Net\ Borrowing$$

Alternatively, from FCFF:

$$(4)\ FCFE = FCFF - [Interests\ Paid \times (1 - T)] + Net\ Borrowing$$

Discounting the future Free Cash Flows to Equity at the required rate of return demanded by shareholders - cost of equity - leads to the value of the enterprise's equity.

$$(5) Equity\ Value = \sum_{t=1}^{n} \frac{FCFE\mathrm{t}}{(1 + Ke)^{\mathrm{t}}}$$

2.2.1.3 Adjusted Present Value

Under this valuation framework the underlying principle is "value additivity", which means that it is possible to detach the different value sources and then sum the different parcels to reach a final value (Luerhman, 1997). In particular, the value of the enterprise is obtained by unscrambling the value of the effects of debt financing (e.g. present value of tax shields and bankruptcy costs) from the value of the assets of the business.

The value of the assets of the business is considered the value unlevered, that is, the value of the company as if it was completely equity financed. Afterwards, different sources of value should be consider, particularly, the collateral effects of different financing schemes, such as the tax savings from interest payment and bankruptcy costs. One must bear in mind that, a leverage increase, increases interest payment, and therefore decreases the taxes a company must pay, but, on the other hand, it also increases the possibility that a company will go bankrupt as a consequence of failing its increasing onerous obligations towards debt owners. (Damodaran, 2006)

Finally, in order to get to the equity value, it is necessary to subtract from the enterprise value all non-equity claims.

$$(6) Equity\ Value = \left(\sum_{t=1}^{n} \frac{FCFF\text{t}}{(1+Ku)^{\text{t}}} + PV\ of\ Tax\ shields - PV\ of\ Bankrupcy\ Costs \right) - Non\ Equity\ Claims$$

Regardless of the DCF model chosen (Free Cash Flow to the Firm; Free Cash Flow to Equity; or Adjusted Present Value, just to name a few) the underlying general idea is common: the value of the levered firm equals the value of the unlevered firm plus the collateral effects of the financing scheme (Cooper & Nyborg, 2006):

$E + D = V$L = Vu + VTS - Bankruptcy Costs

However, as it is explained further, in the WACC approaches the collateral effects of the financing program are already incorporated in the discount rate, whereas under the APV framework they are calculated separately.

2.2.1.4 Which model to choose: APV or WACC?

According to Sabal, J. (2007), the APV method is, currently, the most widely used valuation model after WACC approaches. Given the different advantages and drawbacks of each model it is important to define which of them is a better fit to value the company in hand.

The same author states that APV and WACC models are equivalent when: the cash flows are no-growth perpetuities; there is a single and constant corporate tax rate; and the leverage ratio is constant. However, in the real world these assumptions are not likely to be verified, particularly, the constant leverage ratio and corporate tax rate assumption. If these assumptions are not met, the APV model presents a set of features that makes it a more appropriate model, namely:

1. It does not require a fixed leverage ratio, as the enterprise is valued in a whole, regardless of the leverage impact on value. The debt level impact is considered independently.
2. Tax savings are computed for each period, which means that the tax rate can be adjusted according with the legislation in force in each period.

Nevertheless, this author stresses that the WACC method is the most accurate method for discounting the perpetuity - generally assumed at the end of the explicit period – since, usually, at this point in time it is assumed a fixed leverage ratio, and, furthermore, the WACC adjusts automatically for the discount rate applicable to the tax shields.

Luerhman (1997) and Koller et al. (2005b) partially corroborate the findings of Sabal, stating that the WACC approaches are only suitable when there is a fixed leverage ratio, which is not the case of most companies, since capital structures are not rigid and static. Koller et al. also affirm that it is possible to make amendments to the WACC model to accommodate changes in capital structure, yet, due to the difficulty of such a process they recommend to use the APV method.

On the other hand, in spite of the clear advantages of the APV model under dynamic capital structures, the model also displays major drawbacks. In particular, the burdensome effort of estimating bankruptcy costs (Damodaran, 2006); and the choice of the discount rate to discount tax savings, as there is no consensus on this topic and analysts base their choice on the framework they find more applicable to the reality, which can lead to very different results.(Massari, Roncaglio & Zanetti, 2008)

As far as I am concerned, I will adopt the APV approach, since Eurocash has made recently a large acquisition recurring to a great amount of debt, and it is likely that the debt levels will lower to the levels prior to this operation. Therefore, we will assist to changes in the capital structure as the debt is repaid. Moreover, the advantage defended by Sabal, that the WACC adjusts automatically for the discount rate of tax shields does not seem a clear benefit, since the WACC formula is also dependent on the theoretical framework one chooses, regarding the discount rate for tax savings.

2.2.1.5 The Adjusted Present Value

2.2.1.5.1 Value of Tax shields

There is an extensive literature regarding the valuation of the benefits arising from tax savings on interests, below it is described the most common theoretical approaches (Fernández, 2007):

Modigliani & Miller, 1959 – The value of tax shields, assuming that operational cash flows are a perpetuity, is equal to the present value of tax savings on a risk free debt discounted at the risk free rate.

Myers, 1974 – the value of tax shields is equal to the present value of tax savings discounted at the cost of debt, since the risk of tax benefits is equal to the capability – risk - of paying debt.

Milles and Ezzel, 1980 – these authors stated that, under the assumption that the firm has a fix debt target (D / V), the discount rate for the first year tax savings should be the Kd and Ku for the subsequent years.

Harris and Pringles, 1985 – these authors argued that tax savings have the same risk as the firm's underlying cash flows, since the firm will only pay taxes if it has operational profits. Therefore, under this framework tax savings should be discounted at the required return on assets [Ku] on all periods.

Damodaran (1994) - this author does not provide a formula to calculate VTS, instead he relates the levered beta with the asset beta, assuming that all of the business risk is borne by equity. This approach does not seem realistic, since the main assumption is that the cost of debt is equal to the risk free rate and it is uncorrelated with the risk of the business. However, one might interpret this approach as a way to introduce higher leverage costs in valuation. Nevertheless, it is still not a realistic approach as even though debt holders bear lower market risks they still bear part of the business risk, especially on high leveraged firms.
Acknowledging this, the author expresses another more appropriate formula which takes into account a debt beta different from zero (Damodaran, 1999). However it is not express the way of

calculating the VTS under this assumption and therefore I am unable to consider the latter approach.

Practitioners' method – Fernández names it the practitioners' method since it is a method most often used by consultants and investment banks. Once more, this method does not contemplate a formula to calculate VTS; it only defines a relation between levered beta and the asset beta. The interpretation should be, as well, as a methodology to introduce leverage costs into valuation frameworks.

Fernández (2002a, 2004, 2005a, 2005b, 2007) - unlike all the authors referred Fernández defends that the value of tax shields is not the present value of tax savings from interest, instead it is the difference between the present value of taxes for the leveraged company and the present value of taxes for the unleveraged company. Under this framework the VTS is the present value of D x T x Ku (not the interest tax shields) discounted at the required return on assets [Ku]. This author also expresses the formulas to calculate VTS under different assumptions, namely, when the debt nominal value is different from its market value and when there are costs of leverage.

Cooper and Nyborg, 2006 – these authors explicitly contradict the findings of Fernández stating that "the value of the tax shields IS the present value of tax savings from interests". They present two approaches to calculate the value of tax savings when there is a non-constant leverage ratio: (1)tax savings have the same risk as the operating cash flows (Extend ME); (2) tax savings have the same risk as debt (Extended MM).

The first scenario shall be applicable when there is uncertainty if the firm will be paying taxes in the future, that is, if it is going to have a positive net income, and, therefore, the risk of tax savings should reflect the risk of operating cash flows. This theory is in fact similar to Ruback's capital cash flow approach (1995).

The second framework is, as the name suggests, an extension of MM theory, however it does not assume a constant leverage ratio and neither that the operating cash flows are perpetuities. Under this theory the amount of debt in each period is known *a priori* and the VTS is equal to the expected interest tax savings discounted at the cost of debt.

Nonetheless, it is important to stress out that Cooper and Nyborg findings rely on the assumption that the book value of debt is equal to its market value, and no costs of leverage were considered.

After analyzing and studying the different theoretical frameworks, and taking into account the work of Fernández (2002a, 2004, 2005a, 2005b, 2007), I discarded the first four theories and the practitioners' method as they do not present adherence in the real world, and the assumptions in which they rely on are not verifiable in the actual world. I decided to discard as well the extended MM theory, since has explained by Ruback (2000) interest tax savings only share the same risk as debt under the assumption of a fixed debt value, however when debt is changing over time it is more reasonable to assume that tax savings bear the same risk as operational cash flows, and thus extended MM is no longer applicable.

Thus, as far as Eurocash valuation is concerned, the models for calculating the value of tax shields considered are: Fernández; Cooper and Nyborg – Extend ME; and Damodaran with $\beta d = 0$.[1]

2.2.1.5.2 Bankruptcy Costs

Contrariwise, the normal procedure under the APV approach, Fernández stats that the calculation of the value of tax shields under the existence of costs of leverage already incorporates bankruptcy costs. Damodaran, on the other hand, argues that even considering the costs of leverage it is still necessary to deduct the value of the expected bankruptcy costs. Cooper and Nyborg extended theories do not consider costs of leverage and so there is no arguing in the fact that it is necessary to deduct bankruptcy costs under this valuation framework.

Damodaran (2006) defends that:

$$(7) Expected\ Bankrupcy\ Costs = Probability\ of\ Bankruptcy\ \times Bankruptcy\ Costs$$

The inputs for this formula are not consensual, since it is particularly difficult to estimate the probability of bankruptcy of a company and even more difficult to estimate the bankruptcy costs. These costs do not involve only direct costs – liquidation costs -, but also indirect costs, arising from the attitudes of stakeholders towards the company when they perceive that the company is on distress, which are much more subjective and harder to estimate. Nevertheless, Damodaran

[1] The formulas for the calculation of the value of tax shields according to each of the theories chosen are presented in appendix 1.

suggests estimating the probability of default based on the corporate bond ratings; and the bankruptcy costs based on studies which have hinged on the amplitude of these costs on actual companies. Regarding the latter, studies have shown that direct costs amount on average to 5% of the enterprise value (Warner, J.N., 1977), whilst indirect costs tend to amount to a range between 10 and 23% (Andrade & Kaplan, 1998). Due to the lack of consensus concerning this parameter I will adopt a precautionary measure, assuming that total bankruptcy costs amount to 30%, which is in accordance with Damodaran point of view.

2.2.1.5.3 Estimation of Ke

Every investment bears an exposure to risk, and, assuming rational decisions, investors will demand, for higher levels of risk, higher returns. However, although all models of risk rely on two common assumptions: (1) the risk is the one perceived by a diversified investor; (2) and the demanded returns are a function of the risk levels; they present very different approaches to calculate risk. The most commonly used is the Capital Assets Pricing Model, which takes into account the asset's sensitivity to non-diversifiable risk (the levered beta); the market risk premium and the risk-free rate. Below it is the expression for the risk of equity securities, yet the model can be applied to any type of securities and assets (Damodaran, 1999):

$$(8) Ke = Rf + \beta_{L} \times (Rm - Rf)$$

As aforementioned the cost of equity, reflects the required rate of return demanded by equity holders.

Parameters Estimation

2.2.1.5.3.1 Risk Free Rate

Prior to the banking crisis of 2008, most analysts used as risk free rate the long term government bonds, since no one would even consider the probability of default of a developed country' government. However, the 2008 shock changed critically all the assumptions made until then. Investors started questioning "the credit worthiness of US treasuries, UK gilts, and German bonds"; the credit rating of US government was downgraded; and some European countries were

bailed out. As a result government bonds can no longer be defined, by default, as risk free. (Damodaran, 2010)

Prior to define the risk free rate, it is necessary to understand what a risk free investment is. A risk free investment is an investment, which the actual returns are equal to the expected returns, that is to say, the expected returns are paid with 100% probability. Thus, for an investment to be considered risk free it has to meet two basic conditions:

1. No default risk – a condition that only governments can meet, since even the largest company in the world can default. Governments, on the other hand, can always print more currency, and, thus, meet with their obligations, at least in nominal values. Nevertheless, it has been proved across history that governments might not honor their commitments with creditors, for different reasons.
2. No reinvestment risk – as it is not possible to predict the rates at which the coupons will be reinvested in the future, one may only consider a risk free investment if it is a zero coupon security.

According to the abovementioned conditions only government zero coupon bonds can be used as risk free rate.

In an ideal world, the cash flows should be discounted using a risk free security that has the same maturity and that is denominated in the same currency as the company's cash flows, so that inflation is modeled in a consistent manner between cash flow and the discount rate.

In this specific case, currency is not an issue, since Poland issues government bonds in zlotys, the same currency as Eurocash's cash flows. However, regarding maturity it is impossible to have an exact match, since cash flows are assumed to be ongoing and bonds have fixed maturities. To address this latter problem, what most analysts do is to simply choose a single yield to maturity bond that best matches the cash flows' maturity. Given the characteristics of the cash flows' being valued one might think that the best approach should be the largest maturity bond, however bonds longer than 10 years face problems of liquidity and, therefore, their price might not correspond to their fair value (Koller et al., 2005b). Hence, and as suggested by Koller et al., I will choose the Polish 10 year government bond issued in zlotys.

2.2.1.5.3.2 Levered Beta

The beta should reflect the additional risk that the security on hand as added to a well-diversified portfolio; thus, it measures the asset's sensitivity to non-diversified risk. In practical terms what is done is a linear regression of the security returns against the market portfolio returns, which might be represented by a market index (Damodaran, 1999). The equation is the following:

$$(10) Rj = a + b \times Rm$$

- Rj – returns on the asset
- Rm – Returns of the market portfolio
- b – Levered beta

The beta is the slope of the regression, as it embodies the risk added by the investment on the asset to the overall portfolio.

Although the approach seems quite intuitive and straightforward there are some issues that should be dealt with, in order to reach a fairly good estimation of the beta (Damodaran, 1999):

1. **Market Index Choice**: No indices measure the market portfolio, instead there are equity market indices that comprise a set of equity securities which may or may not be representative of a market portfolio.
2. **Time Period**: It should be kept in mind that a longer time span comprises more observations, but on the other hand if the firm has changed along time then a longer time period will include years in which the company was different in its fundamental characteristics. The goal is to estimate a beta that is the best fit for the future, not the best fit for the past, and as such the time period should only include an interval in which the company characteristics resemble the likely future characteristics.
3. **Return Interval:** Shorter return intervals produce more observations, however assets are not traded continuously, and therefore daily intervals may reduce the correlation with the portfolio. On the other hand, quarterly and annually returns comprise very few observations, thus, and as advised by Damodaran, the return interval most adequate is the monthly one.

2.2.1.5.3.3 Equity Risk Premium

The equity risk premium is a measure of the price that a diversified investor attributes to the perceived risk of a given market, that is, it reflects the "risk premium for investing in the market portfolio (…) relative to the riskless rate" (Damodaran, 2012)

There are three main practical approaches to determine equity risk premiums: (1)surveys to managers to get a general knowledge of what are their expectations towards future returns on equity; (2) expectation based on historical premiums, which are computed by comparing the excess return of equity securities in comparison with risk free assets; (3) and implied premiums, which are a result of estimating forward-looking premiums.(Damodaran, 2012)

As far as I am concerned I will use the historical premiums to estimate the equity risk premium, since it is the only calculation method that does not imply any assumption, and therefore it mitigates the subjective influences on the valuation framework.

2.2.1.5.4 Cost of Debt

The cost of debt reflects the returns demanded by debt holders for the level of risk of the company. In practical terms, Koller et al. (2005b), advise to estimate this value through the yield to maturity of the company's bonds:

$$(13) Price = \frac{Coupon}{(1+YTM)} + \frac{Coupon}{(1+YTM)^2} + \cdots + \frac{Coupon+Redemption}{(1+YTM)^N}$$

In the case that the company does not have liquid long-term debt, which is the case of Eurocash, there are two acceptable approaches to estimate the cost of debt:

- Use credit ratings: Daniels, K. and Jensen, M. (2005) concluded that there is a strict correlation between the credit ratings and the credit spreads. Under this approach one adds to the risk free rate the correspondent credit spread associated with the credit risk of the company analyzed.

- Use the interest rate for the latest relevant long term loan as a proxy for the cost of debt. This is also a fair approximation for the Kd, under the assumption that the bank perceives correctly the risks associated with lending money to that particular institution.

2.2.1.5.5 Tax Considerations:

When computing the tax rate over operational income one might consider two different approaches: i) the marginal tax rate or ii) the effective tax rate.

The effective tax rate is defined as the average rate at which a corporation is taxed on earned income, while the marginal tax rate reflects the tax paid on the last dollar of income. The values are usually different, since, under most legislations, the tax rate will be different according to the level of income[2], and, furthermore, firms may also be able to defer taxes, which will decrease the actual tax paid on a period.

Since the objective is to estimate the real tax savings it is not incorrect to use the effective tax rate. However, under this method underlies the assumption that the company will defer taxes continuously, which is not a correct assumption. Thus, and as pointed by Damodaran (2006) and Koller et al. (2005b), the best approach is to use the marginal tax rate. Nonetheless, Koller et al. stresses that the reported taxes on a company's annual statement reflects, not only the impacts of operating items, but also the impact of non-operating and financial items. And, therefore, analysts should try to detach the latter impacts to find the marginal tax rate over operating items only. Naturally, the success of this step will depend in a large extent to the quality of the information disclosed by the company.

Additional Note: Deferred Taxes

Deferred taxes might be seen as an operational item, since they will flow under the form of cash taxes and subsequently they should be valued as part of the overall enterprise value. Under this assumption, deferred taxes are considered as part of the working capital of the enterprise. (Koller et al., 2005b)

[2] Assuming that for the first €10.000 the tax rate is 10% and for the subsequent it is 20%. A company that earned an income €25.000 will pay an effective tax rate of 16% - €4.000 / 25.000; (4.000 = 10.000 x 10% + 15.000 x 20%) while the marginal tax rate is 20%

2.2.1.5.6 Terminal growth rate

When performing a company valuation one of the main assumptions is the "on-going concern", that is, the assumption that the company will remain in operation for the foreseeable future. As a result it is necessary to estimate the terminal value after the explicit period. The common approach is to do so by applying the growing free cash flow perpetuity formula:

$$(14) Terminal\ Value = \frac{Free\ Cash\ Flow\ at\ the\ end\ of\ the\ explicit\ Period * (1 + Growth\ Rate)}{(Discount\ Rate - Growth\ Rate)}$$

It is mathematically logical that the terminal value will account for the largest part of the total company value, and it will be largely determined by the growth rate set. The only restriction regarding the growth rate is that it must be lower than the growth rate of the economy in which the company operates, as otherwise in a certain point in time the enterprise FCFs would be greater than the economy itself (Damodaran, 2006). Koller et al. (2005b) suggest that the best approximation is the long term rate of consumption growth for the particular industry, plus inflation. Yet, it is useful to develop a sensitivity analysis to understand the impact of the growth rate on the value of the company.

2.2.1.5.7 From Entreprise Value to Price per Share

The adjusted present value method is a valuation framework oriented towards the valuation of the core operations of the overall enterprise[3]; therefore there are still some adjustments that have to be made in order to get to the equity value. In particular it is necessary to deduct from the core operations value all claims that are not represented by equity holders, namely: short and long term debt, debt equivalents (unfunded pension liabilities for instance) and hybrid securities (e.g. employee stock options). (Koller et al., 2005b)

Debt – Deduct the market value of debt, which may not be equal to the book value, especially if there are fixed interest rate and long term debt outstanding. Under these circumstances it is

[3] It is referred as the value of the core operations and not the enterprise value since the overall enterprise value should take into account nonoperating assets as well (e.g. excess cash and nonconsolidated subsidiaries)

critical to compute the market value of debt, using the actual cost of debt (Kd) not the interest rates.

Pension Liabilities – It should be treated as debt equivalent and it should be accounted at market values, which is easily found since recent changes in accounting policies oblige companies to adopt a market-to-market standard regarding the discrimination of these values on the accounting books.

Provisions – Some provisions might be considered non-equity claims and thus they have to be deducted from enterprise value. Particularly, Koller et al. (2005b), identify two types of provisions that should be deducted as debt equivalents: Long-term operating provisions and Nonoperating provisions. Given that the first type of provision reflects the discounted cash expenses that are payable on the long term the book value resembles the actual market value. Contrariwise, the second type of provision is not recorded at a discounted value, however the authors stat that the book value is still a good proxy, since the cash outlays are due in the short term.

Minority interest – a company might control but not fully own a subsidiary, and under this situation the subsidiary's financial statements are fully consolidated in the holding company' accounts. Thus, it is necessary to do some adjustment in order to deduct the value of the subsidiary that the holding does not owned - the so called minority interests. If the subsidiary is publicly listed then it should be used the market prices to value the minority position, if not then it should be used DCF or multiple approaches according to the extent and quality of the information available.

2.2.2 Value Creation

Value creation models, also known as, Excess Return models are variants of the common discounted cash flow model. Under this approach excess return cash flows are detached from normal return cash flows. Normal return cash flows are defined as the required return adjusted to the rate of cost of capital or equity; logically, excess return cash flows represent the returns that fall below (-) or above (+) the normal returns.

The logic beyond this theory is based upon the conjecture that a project is only valuable when the returns on equity are higher than the cost of capital. The value of the firm is then computed through the estimation of future excess earnings. (Damodaran, 2006)

2.2.2.1 EVA

There are several Value creation models, but the most widely used is Economic Value Added (hereon expressed as EVA). EVA aims at creating an "operating measure of periodic discounting that is consistent with discounted cash flow (DCF) valuation and highly correlated with current market value" (O'Byrne, 2005). It is calculated as the excess return gained on an investment or portfolio of investments:

$$(15)\ EVA = (\ ROIC - Cost\ of\ Capital\ ) \times Capital\ Invested$$

Which is equivalent to:

$$(16)\ EVA = NOPAT - (\ Cost\ of\ Capital\ x\ Capital\ Invested\ )$$

$$(17)\ \mathrm{EVAt} = \mathrm{NOPATt} - \left(\mathrm{D_{t\text{-}1}} + \mathrm{Ebv_{t\text{-}1}}\right) \times \mathrm{WACC}$$ Fernández, 2002c

$$(18)\ FCF = NOPAT - \Delta\ Capital$$

Thus, EVA simply differs from FCF methods by replacing the actual CAPEX for the year with a capital charge based on book value of capital and the cost of capital. The underlying rationale for this, is that the reason for FCF poor performance in terms of correlation with current market prices has to do with the fact that capital expenditure is not matched with the periods they benefit the company, a problem that EVA tries to answer. (O'Byrne, 2005)

2.2.2.1.1 EVA Inputs

Capital Invested

Defining the capital invested in assets in place is the most challenging step when performing an EVA valuation. The market value of the firm cannot be used, as it reflects not only capital invested in assets in place but also in growth opportunities. Usually, analysts use as a proxy the book value of capital to estimate the value of assets in place. However, as Damodaran stats, book value is dependent on accounting policies and choices, and therefore this value needs to be adjusted accordingly.

Return on Capital Invested

Estimation of the forecasted after tax operating income made on the investments made.

Cost of Capital

In order to ensure comparability with discounted cash flow methods, the cost of capital is determine based upon the market values of the firm's debt and equity. One might raise the question that there is a contradiction in using market values to estimate the cost of capital and book values to estimate the capital invested. However, we should bear in mind that, in order to generate value the company as to earn more than its market value cost of capital not the book value cost of capital, as it does not reflect the reality.

2.2.2.1.2 Equivalence of EVA and DCF Models

EVA expresses the same cost of investing as FCF, but it also considers initial book capital, which has no impact on FCF. Therefore the value of the company can be expressed in terms of EVA and beginning book capital (O'Byrne, 2005):

$$(19) Enterprise\ Value = Book\ Value_{\ 0} + PV\ of\ future\ EVA$$

Equivalence with DCF:

$$(20) Enterprise\ Value = PV\ of\ Future\ FCF$$

It is mathematically demonstrable that EVA and DCF Models valuations should match, as long as the assumptions are consistent between the two models. Several authors have taken such endeavor and proved this linkage between the two models; indeed, Fernández (2008) has reached the conclusion that the information required for both models is the same and the values reached are also equivalent.

Taking into account such equivalence between the models and the adjustments required to estimate the investment in assets in place[4], which is particularly difficult in the case of Eurocash due to the high level of Goodwill, I rather not use this model in this equity valuation project.

2.2.3 Contingent Claim Valuation

This valuation framework was developed with the intention of capturing the value of the options of expand, delay or abandon a project, which are not consider in any other valuation model. (Damodaran, A., 2005) It is a valuation tool used to value flexibility, that is, to value the future possibilities of an investment project (Fernández, P. 2001). However, in the particular case of Eurocash, one might not foresee any major investment decision for the near future, as the FMCG wholesale market is already near concentration limits, and the company is still digesting the integration of Tradis(2011). Furthermore, as pointed by Fernández, option valuation is one of the most technical complex valuation frameworks, as the definition of the option valuation formula (e.g.Black Scholes) is not straightforward and the parameters, namely, volatility, are hardly estimated correctly.

As far as I am concerned, I will not use option valuation to value Eurocash SA, due to its lack of applicability to the specific case of the company in question and to the difficulty of using such a valuation framework correctly.

[4] In 2001, Weaver conducted a survey and concluded that the typical EVA calculation involves 19 accounting adjustments on average

2.2.4 Relative Valuation - Multiples

Under this method, assets are valued by comparison with the prices at which similar assets are being traded in the market. For instance, an antique dealer will set the prices of its antiques by checking the latest transactions for those types of products. Under the same principle, one might estimate the value of a share by benchmarking with the prices of "similar" stocks. (Damodaran, 2006) It is logical that the precision of the valuation will be directly correlated with the liquidity and efficiency of the market, as there is less room for biases and market errors.

To construct a multiple valuation two steps are required: (1) defining the value drivers (2) and identifying comparable firms (peer group). The performance of the multiples will be, therefore, related to the extent that the value drivers reflect the future success of the company and if the comparable firms bear a resemblance with the firm being valued in terms of the value drivers chosen. (Liu, Nissim and Thomas, 2000)

2.2.4.1 Value Drivers

There are two types of multiples (Suozzo, 2001):

1. **Enterprise Multiples**: Evaluates the entire business in respect to a value driver that must be related with the entire enterprise as well (Sales, EBIT, EBITDA)
2. **Equity Multiples**: Evaluates only the claims of the shareholders on the company in respect to a value driver that must be related only with the shareholders' claims on the assets of the company. (Earnings)

Koller, Goedhart & Wessels (2005a) argued that enterprise multiples are more accurate than equity ones; firstly because they are independent from the capital structure of the company, secondly because earnings, unlike EBITDA or Sales, are affected by non-operating one-time gains and losses, which will cause an artificial impact on P/E ratios and that may not have a clear effect on the value of the company.

Among the enterprise multiples commonly used, Koller *et al.* express their preference for the one which uses as a value driver forecasted EBITA (Earnings before interests taxes and Acquired Intangibles and Amortizations), since as it is demonstrated by them this multiple is dependent

solely on the company's growth rate, return on invested capital, tax rate and the cost of capital – additionally they stress that the two latest drivers ensure a higher comparability between companies if they are operating in the same domestic market[5].

EBITA is preferred over EBITDA, since in most industries depreciation embodies the accounting correspondent of setting aside future capital expenditures to substitute the current assets. Thus, it is necessary to subtract depreciation of the enterprise's earnings in order to understand its true value.

The reasons to use forward-looking multiples rely on the fact that: they are consistent with the principle that a company's value derives from future cash flows; and, secondly, usually forecasted fundamentals are normalized, meaning that they do not consider one-time extraordinary events.

However, the findings of these authors are not regarded as a "Rosetta stone" in multiple valuation.

Au contraire, Liu et al. (2000) presented a ranking for the best multiples that contradicted those arguments. According to these authors, the most accurate describer of stock prices is forward earnings, which seconded the preference for using forward-looking multiple. Nonetheless, the study proved that earnings based multiples explained better prices than EBITDA. Furthermore, Lie E. and Lie H. (2002) also came to a conclusion that asset multiples and forecasted P/E perform better than EBITDA ones.

Ultimately, the best explanation for this topic is presented by Baker and Ruback (1999) - "*The basis of substitutability that provides the most precise estimate of value varies by industry because the underlying value drivers differ across industries*". [6]

2.2.4.2 Comparable Firms

Alford (1992) stressed out that enterprises segmented based on the industry criteria generated a lower valuation error, when using P/E multiple. On the other hand, Damodaran argued that to define the peer group, it should only be taken into account cash flows, growth potential, and risk

[5] In the same domestic market companies share similar tax legislation and cost of capital
[6] It is important to stress out that none of these studies included EBITA metric as suggested by Koeller et al..

associated with the firm, that is to say that industry or sector have no role on the definition of the peer group.

These remarks are partially seconded by Cheng and McNamara (2000), which concluded that a comparable group based on return on equity and other fundamentals, alongside with industry criteria, yields lower valuation errors.

It is clearly understandable that the sources of value come from cash flows, growth potential and the discount rate (risk), therefore the comparable firms should have similar figures for the given value drivers, regardless of the industry in which they operate. Contrariwise, nowadays, analysts use systematically peer groups based on industry; the underlying assumption is that companies operating in the same industry present the same risk, growth and cash flow profile. An additional reason to do so, has to do with lowering search costs and time, since it is much easier to pick business competitors, than to search the whole market for companies with similar fundamentals.

As an additional note I would like to stress out that the common and most precise approach to estimate the multiple is to use the harmonic mean of the peer group, as concluded by Baker and Ruback (1999)

2.2.4.3 Opinion on Multiples

Although there are available several researches regarding multiple valuation, there is no consensus between the authors, in which respects the choice of the value drivers and the choice of comparable firms.
As a personal opinion a best approach should encompass a mix of value drivers, which should take into account the business characteristics, but focused on forward and enterprise value multiples; regarding comparable firms the criteria should be, when possible, industry, growth, risk and cash flows. (Koller, Goedhart & Wessels, 2005b).

Multiple valuation is, when performed correctly, a very useful and robust tool, simple to compute, avoiding valuation errors and relevant as it is focus on the main metrics used by investors. A proof of its usefulness was reported in the work of Demirakos, Strong & Walker (2004); they found out that 88,5% of a 104 reports sample used P/E multiples, whereas only 38,5% used a Discounted Cash Flow valuation.

On the other hand, it is very simplistic, filtering a large amount of data into a single ratio, neglecting important information concerning value accretion; it is a stationary tool – a "photograph" of a point in time; it is easy to manipulate through accounting figures and it lacks comparability. (Suozzo P, 2001)

As far as I am concerned, this type of valuation reveals to be particularly useful when complemented with other more accurate and precise methods of valuation such as Discounted Cash Flows. But it should not be considered as a standalone valuation model to value an entire enterprise.

Regarding the specific case of Eurocash SA and applying the literature studied I decided to

1. **Multiples Choice:**

P/E; P/E (forecasted) – as according to Liu et al. these were the two better performing multiples;

EV/EBITDA; & EV/EBITA –according to the findings of Koller et al..

2. **Peer Group**

The peer group shall be defined based on industry, cash flow, risk and growth profiles. The key point in this topic is that industry should not be seen as, neither a mandatory exclusion criteria, nor as an inclusion one.

2.3 Emerging Markets

As aforementioned the Capital Asset Pricing Model is a powerful tool that has been successfully applied in developed markets. However, this success has not been achieved in most of the emerging markets. Different reasons might be responsible for this, but the most important ones relate with market efficiency and integration, as well as, country risks that are not present in developed markets. (E.g. Expropriation; Political Biases; Economics high volatility, among others) (CR. Harvey, 2001)

Hence, some adjustments have to be made when valuing assets on emerging markets, yet I will not lay down the required adjustments as from my personal opinion and from other authors'

Poland is not an emerging market. Below I list a set of reasons why I believe Poland is a developed country with an efficient market:

1. Ranked as a Very High Human Development Country by the UN (0.813 – the IMF minimum benchmark for advanced country is 0.788)
2. 8th largest European economy (By GDP)
3. The Warsaw Stock Exchange (WSE) has 436 listed companies whose capitalization totals to a value of PLN 670 billion (approx. € 162 billion). The 20 most valuable companies (WIG 20) have a market capitalization of €70 billion. (PSI 20 is worth only €40 billion)
4. Poland is part of European Union and its integration in the European financial system has improved its openness to investors, and, therefore the liquidity and efficiency of the market has also improved.
5. Poland is a democratic country and its judicial system follows a set of laws common to the most developed countries.

2.4 Final Considerations on Valuation Methods

The large set of different approaches towards equity valuation, suggested by different well-known and recognized authors, advocates that this is not a consensual topic. Nevertheless, it is recognized in the literature analyzed that there are best practices and that different methodologies apply best under certain company' characteristics. Thus, and for the reasons explained previously, I will value the company based on the adjusted present value models proposed by Fernández, Nyborg and Cooper and Damodaran complemented with a multiple valuation. Once again it is important to stress that company valuation is not an objective task, it is rather dependent on the assumptions and considerations made, which I will explain thoroughly.

3. Eurocash Group Business Overview

Prior to proceed to Eurocash SA valuation it is utterly important to understand the dynamics of the market in which the company operates, as well as, the underlying forces of the company itself.

3.1. Macroeconomic look: Poland

Eurocash's business is fully based in Poland; most of its clients and suppliers are Polish and, therefore, the macroeconomic environment of the Polish economy will have a determinant effect on the company' results and future development. In particular, there are four major factors that affect the Eurocash's operations:

Economic Development - GDP

Economic growth means that a country's production is increasing and upon the sale of those products the national income will also increase. Naturally higher levels of production and income will mean higher volume of business, inversely lower levels of GDP will result in a decay of business levels.

Aggregate Income:

Aggregate income figures are very good indicators of future consumer demand, as there are only two options to do with the available income: spend or save. Thus, an increase in the disposable income will lead to higher levels of spending, assuming a constant level of savings to disposable income.

Inflation Rate:

Inflation reflects the rate of change in the general level of prices of goods. It plays a major role on the wholesale market, since it reduces the purchasing power of the consumer (Consumer Price Index) and on the other hand increases the cost of production for the firm (Producer Price Index),

and as a consequence it is generally predictable that an increase in the inflation rate will have a negative impact on the wholesale business.[7]

Demographics:

Poland's rural migration is still in a somehow early phase in comparison with western European countries (Appendix 2), and most of these rural areas' economic activity is based on family farms producing small crops according to traditional methods. As a result of this type of agricultural activity the Polish modern consumer is used to organic, fresh and high quality food. Additionally, as it can be seen on appendix 3, polish living quarters are small, which combined with limited monthly budgets, especially in rural areas, molded buying habits towards a frequent, small value and quick shopping (appendix 4). This kind of shopping is preferably done in close-by small shops, and 70% of these kinds of shops are customers of Eurocash.

Year: 2012

Polish consumers face difficulties for the current year, as a result of a stall in employment increase (0.4%) and a slower wage growth (3.8% vs 5.4% in 2011) which combined with a high consumer price index will result in a slower growth rate on disposable income (1.2% vs 3.9% in 2011). Overall, according to BZWBK Macro team, retail sales are expected to grow by only 4.6%, which compares with an 11.0% growth in 2011.[8]

Food sales are expected to continue growing (app. 3%) as a result of the food consumer price index (3% as well), which means that sales volume will remain unchanged.

The macroeconomics trends forecast a poor year for retailers since the slow increase on disposable income will shift Polish consumers towards a higher price sensitivity behavior, favoring discounters' format. Moreover, only market leaders will be able to take advantage of scale economies, offering competitive prices and attracting new customers, achieving growth rates above the inflation.

Under this scenario I believe that Eurocash, as a market leader, has the required characteristics to outperform the market in the medium and long term. Below I list the reasons why Eurocash is foreseeable to outperform the market even under such negative macroeconomic trends:

[7] Assuming Normal Price Elasticity

[8] The estimates here presented for 2012 are based on BZWBK research note

- Eurocash has proven that is able to overcome difficult macro trends. It has maintained on a continuous basis a solid Like for Like growth over inflation, which means that, assuming Eurocash's prices follow CPI, the company is able to attract more customers and increase their spending every year.
- Sound EBITDA growth: Since 2007 it has registered a compound annual growth rate of over 21%, with solid increases every year.
- Tradis Acquisition: Eurocash latest acquisition is a proof of Eurocash managers' confidence on the Polish retail market, even under such a macroeconomic turmoil. This acquisition established Eurocash has the second largest player in the FMCG market, behind Biedronka, and far distant from other competitors. This takeover has given the company the required competitive scale and the base of franchise partners to outperform the wholesale market in the medium and long term. Furthermore, it is foreseeable that Tradis' franchise chains will increase their penetration rates to levels similar to Eurocash, supporting even further the LfL growth in the forthcoming years.

To conclude, I consider that: the immunity of Eurocash to the latest negative economic trends; the new scale with Tradis takeover; the proven robust skills of Eurocash's management; alongside with the challenges that its followers face are reasons enough to believe that the company will maintain its second position on the FMCG market unchallenged for the foreseeable future.

3.2 Polish FMCG Market

Fast Moving Consumer Goods comprise food products, non-alcoholic beverages, alcoholic beverages, tobacco products, household chemicals and cosmetics. The value of these products was estimated at PLN 212.3 billion in 2011, by GfK. These goods are sold mainly through retail stores to the final consumer and through wholesale entities to retail stores.

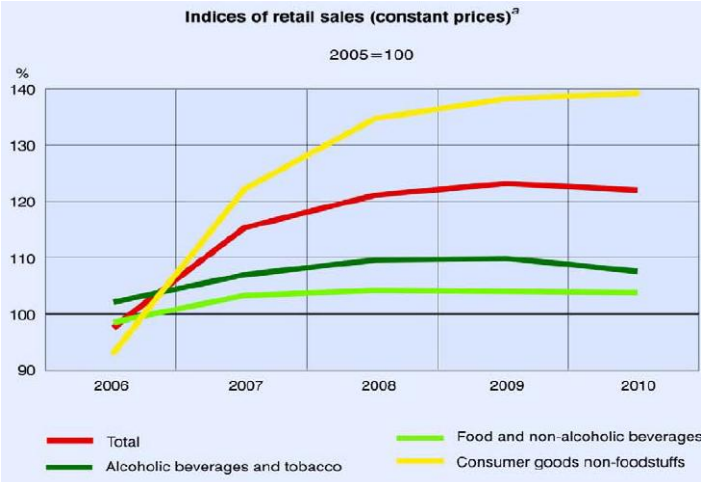
Prior to analyze retail and wholesale channels, it is important to stress out that, although Eurocash is a wholesale trade company its business is intimately dependent on the retail activity. Firstly, sales volume is strictly correlated with the retailers', as they are its main client; and secondly the prices charged will have to be set in such a way that retailers can be competitive with one another. Thus, Eurocash competition is not only represented by other wholesalers, but also by the retailers that compete with its clients.

It should also be noted that the retail and wholesale market is a cyclical business, however since the whole cycle has a duration of exactly one year the historical annual data reflects the whole dimension of the cycles, and no further adjustments have to be made. (Appendix 5)

3.2.1 Retail FMCG Market

The Polish retail market represented in 2010 PLN 593 billion, which represented an increase of 1.7% in comparison with 2009. From these, PLN 156 billion were food and non-alcoholic beverages sales – 2.5% growth vs 2009 – alcoholic beverages and tobacco amounted to 53.8 billion – 3.3% growth vs 2009 – while non-foodstuff goods represented PLN 362.1 billion – a 1,3% growth. The remaining 21.1 billion relate to retail sales in catering establishments.

From 2005 to 2010 the major driver of retail sales growth was the non-foodstuff goods, which increased almost 40% until 2009 stabilizing since then[9], on the other hand alcoholic beverages and tobacco and food and non-alcoholic beverages have only grew 7,5 and 5%, respectively, in the same five year time frame.



Graph 1 – Retail Sales Indice, *Polish Central Statistical Office*

Retail stores are the primary FMCG product distribution channel, and according to the Polish Central Statistical Office there were 346.000 retail stores operating in Poland as at the end of 2010, a 7% decrease comparing to 2009. Nevertheless, the sales area as increased to 31 769 thousand m^2, this derives from the closure of small shops (sales area inferior to 100 m^2) and the opening of larger stores. Even so, stores with a sales of up to 99 m^2 constitute 47,2% of the total number of stores, this is a result of the already mentioned preference of Polish consumers for close-by small shops.

[9] In constant prices: 2005 = 100

3.2.2 Wholesale FMCG Market

Polish Central Statistical Office reported, for 2010, that the value of the wholesale market regarding food products, non-alcoholic beverages, and alcoholic beverages was of PLN 133.7 billion, which represented an overall growth of 3.5%. Note that this does not represent the value of the FMCG wholesale market, since it does not include tobacco products, cosmetics and household chemicals. Food and non-alcoholic beverages sales have increased by 5.8% reaching PLN 108.4 billion; while alcoholic beverages sales have decrease by 5.2 percentages point amounting, in 2010, to PLN 25.3 billion.

The wholesale distribution of FMCG products is targeted principally at the traditional small stores referred before; alternative channels such as kiosks and petrol stations; and specialized food establishments.

This market is characterized by a classic and traditional form of business – e.g. sales with delivery, trade credit. There are also some cash & carry warehouses which offer additional services, characteristic of this traditional form such as deferred payment dates and the delivery of goods. The FMCG wholesale market involves specialized warehouses, whose offers cover only a specific type of products, as well as warehouses offering a wide range of FMCG products. However, given the characteristics and needs of the target clients, the range of products offered and the sales format cannot be considered a distinctive competitive advantage in this market.

The strongest FMCG wholesale entities are: Eurocash Group (19.1%); Makro Cash and Carry Polska S.A. (5.5%); Group Selgros Sp. z o.o. (4.3%); Lekkerland Polska S.A. (3.8%); Ruch S.A. (2.6%[10]); PHP Polski Tytoń S.A.(3.1%); Kolporter Service S.A. (2.8%); Ruch S.A. (2.6%).[11]

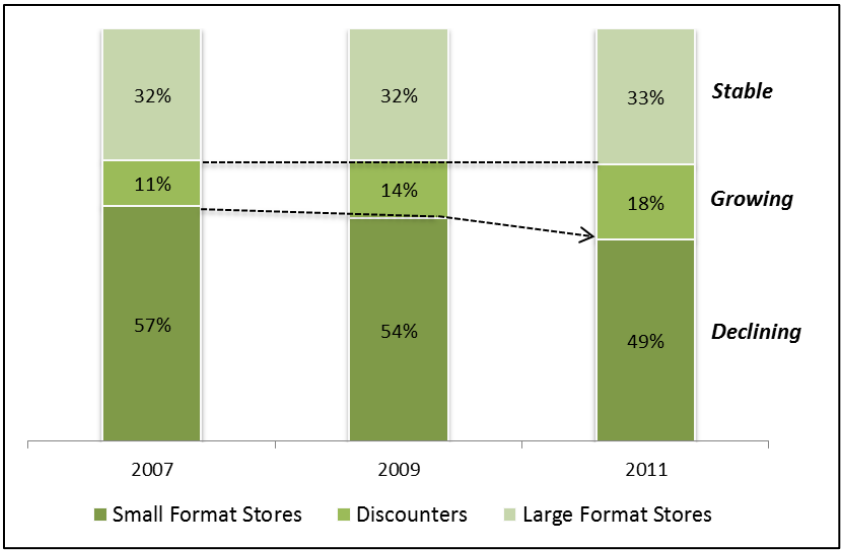
[10] Estimated
[11] 2012 Data

3.2.3 Competition

Competition in the FMCG wholesale distribution Polish market is based on the supplying of the aforementioned traditional small stores; specialized food stores such as bakeries, meat and fish stores among others; and the alternative channels which comprises the HoReCa segment (Hotels, restaurants and catering), petrol stations and kiosks.

Taking into account the organizational format and sales area, regarding stores, the distribution channels can be segmented as: (a) a modern distribution channel comprising: large format stores (hypermarkets and supermarkets) and discounters; and (b) a traditional distribution channel covering retail locations with a sales area of up to 300 square meters, usually family owned.

The small format stores are the leading format in Poland with 49% of the food retail market share, yet, it was 57% in 2007. The reason behind this decrease in market share is the fast paced growth of discounters – 23% growth p.a[12] - which allowed for a 7% increase in market share, reaching an 18% share in 2011.



Graph 2 – Food Retail Market Structure, *Eurocash Investment Relations*

Be that as it may, the sales per store in the traditional channel are still increasing at a 3% rate per year. The underlying reasons for the decrease in the market share are: the lower increase than the overall market increase; and the decreasing number of stores, mainly because unprofessional and inefficient stores are unable to strive in this increasingly higher competitive market.

Large format stores, on the other hand, have remained stable for the past years increasing one percentage point in market share since 2007, and the latest results from the first semester of 2012 do not suggest any significant changes to this trend. On the contrary, "hypers" might even assist to a decrease in market share as a result of poor like for like growth. (Appendix 6)

[12] 2007-2011 CAGR

The conclusion from the latter paragraph is that the market share of traditional stores is being threatened almost exclusively by discounters, who are being very successful up until now, while large format stores remain stable despite large investments in new openings. It is therefore relevant, under Eurocash valuation perspective, to analyze this competition between discounters and small retail stores and forecast how this will affect the retail market:

1. Despite the registered fast growth, discounters are close to natural saturation limits found in mature FMCG markets such as Germany or Spain – app. 20-25%. Therefore, I estimate a slower growth rate for this store formats on the next years up until reaching saturation limit, when it is predictable a stabilization of the market share. (Appendix 7)
2. Furthermore, non-price factors are getting increasingly more important for Polish consumers, which undermine the largest advantage of discounters – Price. (Appendix 8)
3. Small format stores suit best the modern consumer, since they are more capable to satisfy their need for quality, range and convenience than discounters. Unreservedly prices must be set on a competitive format, as it is still the major driver for purchases decision making.(Appendix 8)
4. Mergers & Acquisitions and modernization programs along the traditional stores enable those stores to compete in an effective way against large format stores and discounters. A proof of this competitive strategy is the recent association of stores with areas of up to 300 m^2 in franchise networks of two types: a traditional one with loyalty programs; and a modern one characterized by binding contracts between retailers and supplies. In fact, according to GfK 19.000 stores were associated through the 20 biggest franchise networks.

Ultimately I find that the traditional format stores are adapting well to this increasingly competitive market, producing the right responses to the discounters' threat. Hence, I believe that the role played by traditional stores is not expected to decrease; instead it will maintain stable its high importance for the forthcoming years.

3.3 Eurocash Group

3.3.1 Overview

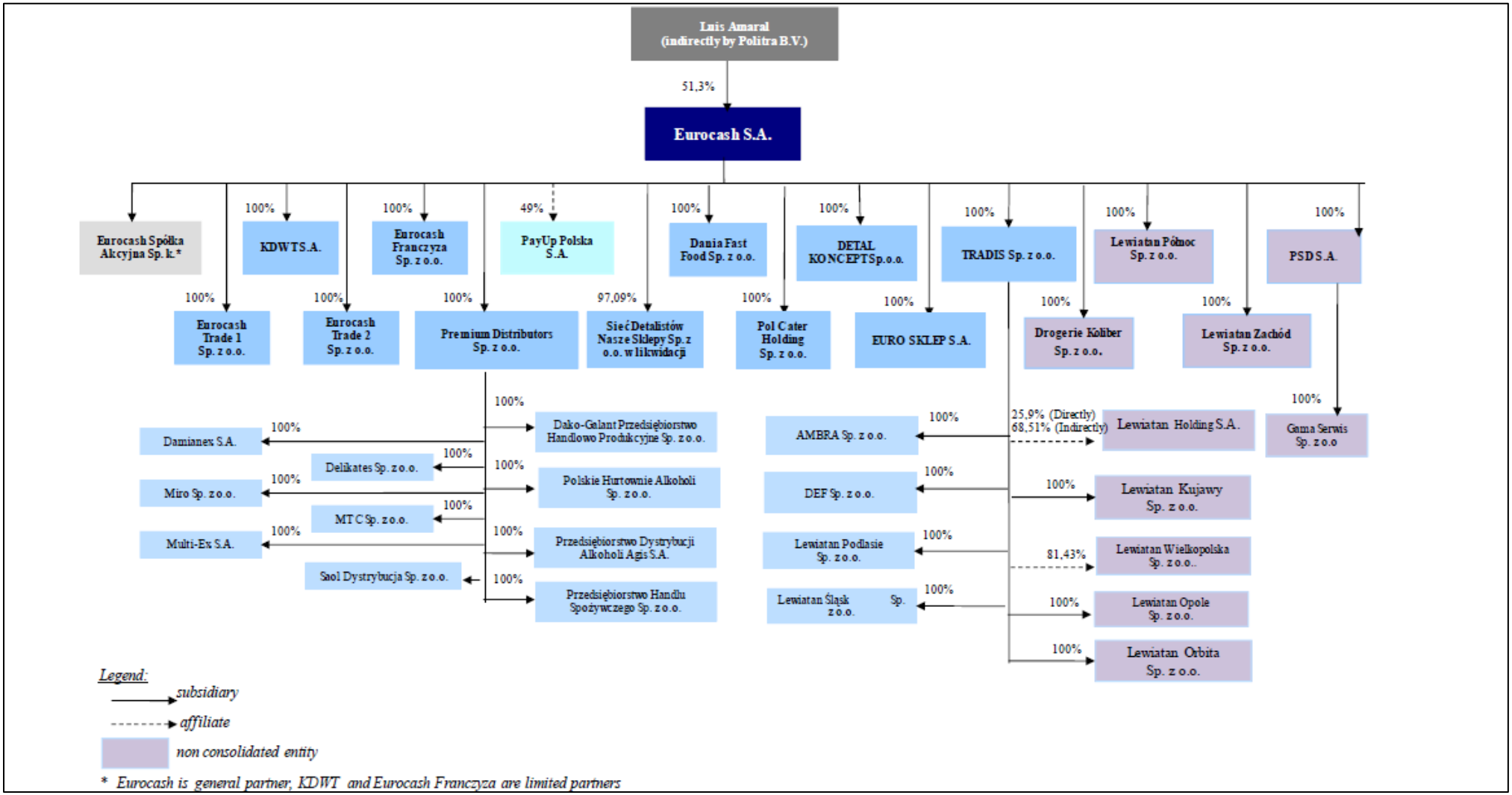
Eurocash Group is one of the largest groups in Poland in terms of sales volume, listed on the Warsaw Stock Exchange with a market value over 6 billion zlotys, approximately € 1.50 billion.
Eurocash Group is a wholesale distributor of Fast Moving Consumer Goods (FMCG) to clients from all significant segments of the traditional retail market, namely, traditional retail stores; petrol stations and the HoReCa channel.

To reach such a widespread base of clients Eurocash has developed a range of distribution formats, which can be seen as completely hermetic businesses from one another:

- **Cash & Carry** – National network of Cash & Carry type warehouses. It is responsible for the loyalty program for the "abc" network stores;
- **Delikatesy Centrum** – Franchise system for retail stores;
- **KDWT** – Active distribution of tobacco products and other FMCG, namely, impulsive products;
- **Eurocash Dystrybucja** – Focused on the supply of petrol stations, hotels and restaurant chains;
- **Premium Distributors** – Wholesale and retail distribution of alcoholic beverages;
- **Tradis** – Active Distribution of wholesale FMCG products and franchise chains of retail stores similar to what is done under the Cash & Carry unit;
- **Other** – Besides its core activity, Eurocash is also engaged in the distribution of "electronic financial services through a network of approximately 4,200 (as at 31 December 2011) terminals located in stores nationwide through PayUp, which offers, among others, the ability to check the balance on mobile phones, pay bills, and accept payment cards."

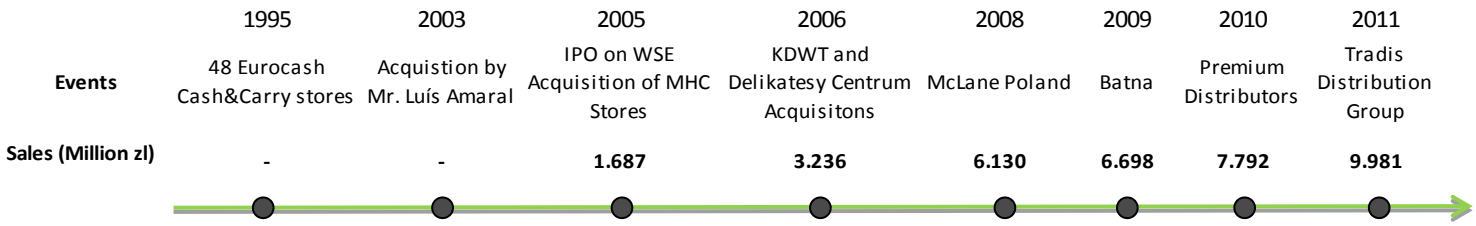
The group revenues grew by 28.1% in 2011 amounting to nearly PLN 10 billion (9980.6 million), EBITDA grew by 15.2% to PLN 265.76 million and net profit was of PLN 134.39 million – a 4.6% growth.

3.3.2 Organizational Relations



From Eurocash 2011 Annual Report

3.3.3 Eurocash History



Eurocash began its operations in 1995 as a traditional discount cash & carry wholesaler under the Eurocash brand, fully owned by Jerónimo Martins. The acquisition in 2003 by Mr. Luís Amaral under a Management Buy Out has changed critically the strategy pursued until then, and in 2005 the company was listed on the Warsaw Stock Exchange through an Initial Public Offering. On that same year Eurocash started a consolidation strategy towards the fragmented wholesale Polish market with the acquisition of MHC stores.

The following years have confirmed Eurocash' focus on market consolidation and on strong organic growth. The successful accomplishment of this strategy skyrocketed Eurocash's revenues and profits. And it is currently the leader in wholesale FMCG distribution; second in the whole FMCG market; and the largest Polish operator of franchise chains of retail stores.

3.3.4 Distribution Channels

3.3.4.1 Eurocash Cash & Carry

Eurocash's Cash and Carry business is comprised by 138 outlets, which allow for a complete geographical offer (it is present in all 16 voivodships[13]), and two distribution centers that serve the entire Cash & Carry chain.

This channel strategy is based on three pillars: (1) low prices; (2) selected products and (3) an inviting and friendly environment towards the customer.

[13] Provinces

Low Prices - the rationale for this strategy is to allow Eurocash's customers to be competitive with other retailers', particularly, discounters. Eurocash's success is directly correlated with the success of its customers, which can only be achieved if they are able to offer their products at a price which rivals with the ones from discounters'. To do so the cost of goods purchased at Eurocash has to be sufficiently low to pursue a price based competitive strategy.

Selected Products – With the intention of reducing inventory costs and stockage time, Eurocash decided to put available only an optimized selection (app. 4500) of products. The selection criterion was based on the customer's needs and the products' turnover.

Customer Oriented Environment – Eurocash Cash & Carry's Outlets display a friendly layout and simple product presentation; furthermore the company also have a generous policy of allowing the consumer to buy single items, preventing them of overstocking and investing excessive working capital needlessly.

This channel has also established a well-known franchise of retail stores named as "abc":

- "Largest neighborhood store chain, with 4748 stores" (Eurocash website), responsible for 50% of this business unit sales;
- The company offers franchisees a complete marketing support, from TV advertising to personnel clothing); and better shopping benefits, namely, larger competitive discounts and exclusive promotional campaigns.
- Moreover, "abc" stores have no restriction in what concerns: (a) suppliers selection, even if the products are inside Eurocash' product range; (b) variety of goods available for sale; and (c) selling prices.

3.3.4.2 Delikatesy Centrum

"Delikatesy Centrum" is the largest supermarket franchise chain in south-eastern Poland, encompassing a total of 676 stores.

Franchisees under this chain can take advantage of a complete marketing support; store design; promotional campaigns and merchandise, as well as, competitive prices for the most popular products.

Product replenishment is provided in fifty percent (50%) by Eurocash S.A, using two distribution centers fully allocated to serve this business unit, the remaining fifty percent, comprising mainly meat and fresh products, are replenished directly by selected suppliers.

3.3.4.3 Tradis Distribution Group

Tradis Distribution Group, acquired in 2011 from Emporia Group for an amount of PLN 1.1 billion, consists of a set of companies engaged in active distribution of FMCG products through wholesale channels, as well as, companies managing franchise chains and partner networks, similar to "Eurocash Cash & Carry"' activity.

As of the acquisition date (December of 2011) Tradis was operating 58 regional warehouses and 8 distributions, which represents only an additional warehouse in comparison with 2010. Concerning franchisee stores the number has decreased by 144 to a total of 3.496, while the number of partner shops has grown to 557, from 492 in 2010.

3.3.4.4 KDWT

KDWT is a specialist on impulsive sales. It is currently the second largest tobacco wholesaler and it is engaged in the active distribution of specialized impulse products to kiosks, petrol stations and retail stores.

It operates at a countrywide level through its 105 branches, which are supported by 2 distribution centers, delivering products to more than 9.000 stores and retail chains.

KDWT employs 160 specialists, who visit clients on an everyday basis offering them a range of products that includes over three thousand items. In particular: impulse foods - coffee, tea, soft drinks, candy; tobacco products; cigarettes, cigars and cigarillos; and other articles, such as - pet food, cosmetic chemicals, condoms, pharmaceuticals, phone cards, batteries or razors.

3.3.4.5 Premium Distributors

Acquired in 2010 for PLN 400 million, Premium Distributors is Polish biggest wholesale distributor of vodka and strong alcohol beverages to retail stores, hotels, restaurants and petrol stations.

3.3.4.6 Eurocash Dystrybucja

This channel is responsible for the supply of gas stations, through "Eurocash Dystrybucja" brand, and for the supply to the HoReCa channel through "Eurocash Gastronomia" brand.

"Eurocash Dystrybucja" and "Gastronomia" were both acquired in 2008, from McLane Polska through a sale agreement of the totality of shares of McLane.

Dystrybucja is a leader on the FMCG distribution to petrol stations, namely, PKN Orlen, Lotos, Statoil, Lukioil and independent stations. The company displays as major company advantages the know-how and purchasing power of the holding company, as well as, "all on one truck" deliveries which largely reduce the cost of distribution, providing better conditions to clients.

Gastronomia is involved in the wholesale distribution of food products to restaurants and cafeterias. This enterprise acts as a long term partner with its clients, in order to satisfy their needs in an efficient, cost saving and punctual manner.

3.3.5 Eurocash Future Strategy

According with the company's Annual Report of 2011, "the primary goal of the Group is to ensure the competitiveness of independent retail stores in Poland and to offer added value to the Group's clients as well as to increase the value of the Group for its shareholders". To do so the goals are threefold:

1. Address the needs of traditional Polish retail stores across all range of FMCG products and types of distribution channels;
2. Leverage the economies of scale effect, typical of the wholesale business, in order to create a long term sustainable competitive advantage;
3. Cost optimization and integration of the operating systems

The consolidation trend on the wholesale market led to a decreasing number of wholesalers, and due to anti monopolistic laws it is not foreseeable any major acquisitions by Eurocash Group in the future. Accordingly, and as it is stated in 2011 Annual Report, Eurocash strategy is focused on organic growth in the different business units, and surgical small acquisitions of other wholesalers and franchise networks.

3.3.5.1Cash&Carry

The strategy for this business unit is based on two goals: (a) organic growth, i.e., like-for-like growth through further implementation and integration of this business unit successful concept in existing outlets; and (b) regional expansion through the acquisition of selected distributors in regions where Eurocash's presence is not as a strong as it could be.

a. Like-for-like growth

In order to achieve larger turnover with the same number of stores, Eurocash aims at improving customer satisfaction to increase their spending. This implies:

a) Widening the range of categories and products
b) Offering a larger number of regional products
c) Setting competitive prices, especially on the most sold products
d) Increasing operational efficiency
e) Enhancing customer experience through warehouses modernization, better layouts and in-store product placement, communication programs and other features of customer services.

Furthermore, there is also a clear bet on the "abc" franchise chain, whose concept has been successfully adhered by independent owners of traditional stores. Accordingly, and with a clear focus on organic growth, Eurocash aims at:

a) Increasing the number of "abc" stores;
b) Increasing the purchases by "abc" stores at Eurocash
c) Helping "abc" stores in increasing the total sales to the final consumer.

b. Geographic expansion

According to the company Annual Report (2011), "Eurocash Cash & Carry" business is profitable in any town whose population exceeds 25 thousand inhabitants. Thus, and taking into account Polish demography, this business unit has a potential market of over 150 towns. And, although Eurocash presence covers the whole country, there are still some towns in which the company is not

present, which might justify the acquisition of small regional operators or the opening of new stores. An example of this strategy is the acquisition of Batna in 2009 which have allowed the company to strengthen its position in the Warsaw region.

The company stats in its 2011 Annual report that intends to open 6 to 8 new stores in 2012, however that is dependent on the integration process of Tradis Distribution Group. Regarding new acquisitions the company does not refer any target or purchase intention.

3.3.5.2 Delikatesy Centrum

The development strategy for this business unit is threefold:

a. Improving purchasing terms for customers;
b. Complete marketing support for franchisees under the "Delikatesy Centrum" brand;
c. Expansion of "Delikatesy Centrum" franchise across Poland supported by Eurocash Dystrybucja logistic infrastructures and the opening of app. 100 stores in 2012.

3.3.5.3 KDWT

Eurocash strategies for this distribution channel are the following:

a. Increase turnover with the same sales force;
b. Improve customer base through a better competitive offering of KDWT products;
c. Increase the number of cross-selling between KDWT and Eurocash C&C customers. The rationale behind this strategy relies on the fact, that KDWT clients may be interested in purchasing food products from Eurocash Cash & Carry; and Eurocash clients may see an advantage in purchasing high value impulse products from KWDT;

Eurocash expects with these strategies to "expand [KDWT] tobacco sales to Eurocash clients and to increase the share of impulse products in total sales, which will contribute to increase realized margins and improvement of working capital dynamics" (Eurocash Website)

3.3.5.4 Tradis

Eurocash strategy towards Tradis is centered on the integration of the acquired group, which comprises 17 distribution companies. The main goal to achieve in the short and medium term is the release of the synergies resulting from this acquisition, namely:

a. Improve penetration rate of Tradis franchise chain to levels similar to "abc" franchise (15-25% vs 50%);
b. Cross-sale between Tradis, KDWT and Premium Distributors – a complete offer: food; tobacco alcoholic beverages and impulse products;
c. More efficient stock levels;
d. Better purchasing agreements as a result of higher bargaining power;
e. Optimization of General & Administrative costs – cost cuts on back office departments;
f. More efficient logistic network;
g. Release of working capital;
h. Disposal of part of Tradis Real Estate.

The above points were based on IDMSA Dom Maklerski report.

3.4 Forecasting

One of the most subjective and important tasks of an equity valuation project refers to the forecasting of the business fundamentals.

3.4.1 Revenues

Eurocash Group has some particular characteristics that have to be taken into account when considering revenues' estimation. Firstly it comprises different business units growing at different rates; secondly it is growing at a rate higher than the market; and lastly it is "digesting" the recent acquisition of a large competitor. Hence, I will forecast revenues for each business unit separately:

Eurocash Cash & Carry – revenues were estimated based on the sales per warehouse times the number of warehouses. Sales per warehouse estimation was set taking into account the objectives regarding like for like growth and CAGR from 2007 and to 2011; the number of warehouses was set based on: the potential market; the current warehouses; and the additional warehouses resultant from Tradis acquisition.[14]

Store Analysis	2007	2008	2009	2010	2011	CAGR	2012 H	2012	2013	2014	2015	2016
Cash&Carry	102	111	120	129	137	**6,1%**	**139**	143	148	152	154	155

Table 2: Eurocash C&C Store Projection, *Eurocash Annual Reports and Own Projections*

Delikatesy Centrum – The Company is making large investments to expand this brand country-wide (currently it is focused on southeastern Poland), therefore we might expect an accelerate revenue growth until "cruise speed" is reached. The assumption regarding this business unit was that the density of stores per 100.000 habitants in the southeast will be replicable in 2016 at a country level. From 2016 onwards revenue growth is based exclusively on like for like growth assumption.[14]

Store Analysis	2007	2008	2009	2010	2011	CAGR	2012 H	2012	2013	2014	2015	2016
Delikatesy Centrum	295	376	466	561	650	**17,1%**	**693**	**750**	833	926	1029	1143

Table 3: Delikatesy Centrum Store Projection, *Eurocash Annual Report and Own Projections*

KDWT – For this business unit the major drivers for revenue growth are organic growth and cross-selling with Eurocash C&C, however one should take into account that under an economic turmoil tobacco and impulse products might be seen as superfluous.

[14] From 2016 onwards it was estimated both for Eurocash C&C and Delikatesy Centrum that sales growth would rely exclusively on like-for-like growth

Premium Distributors – Poland is one of the largest world consumers of vodka due to cultural customs, and even under this economic crisis it is not expected a major change of habits – from 2008 to 2010 alcoholic beverages and tobacco retail sales have grown more than 13%[15]. Thus, revenue growth shall be similar to KDWT, driven by medium organic growth and cross-selling with other business units.

Eurocash Dystrybucja – Unlike the other business units Dystrybucja has not presented a clear growth path, instead its turnover has been fluctuating since 2007. Given this and the fact that this business unit has slightly grown in the first semester of 2012 I will assume a very modest constant growth for this unit.

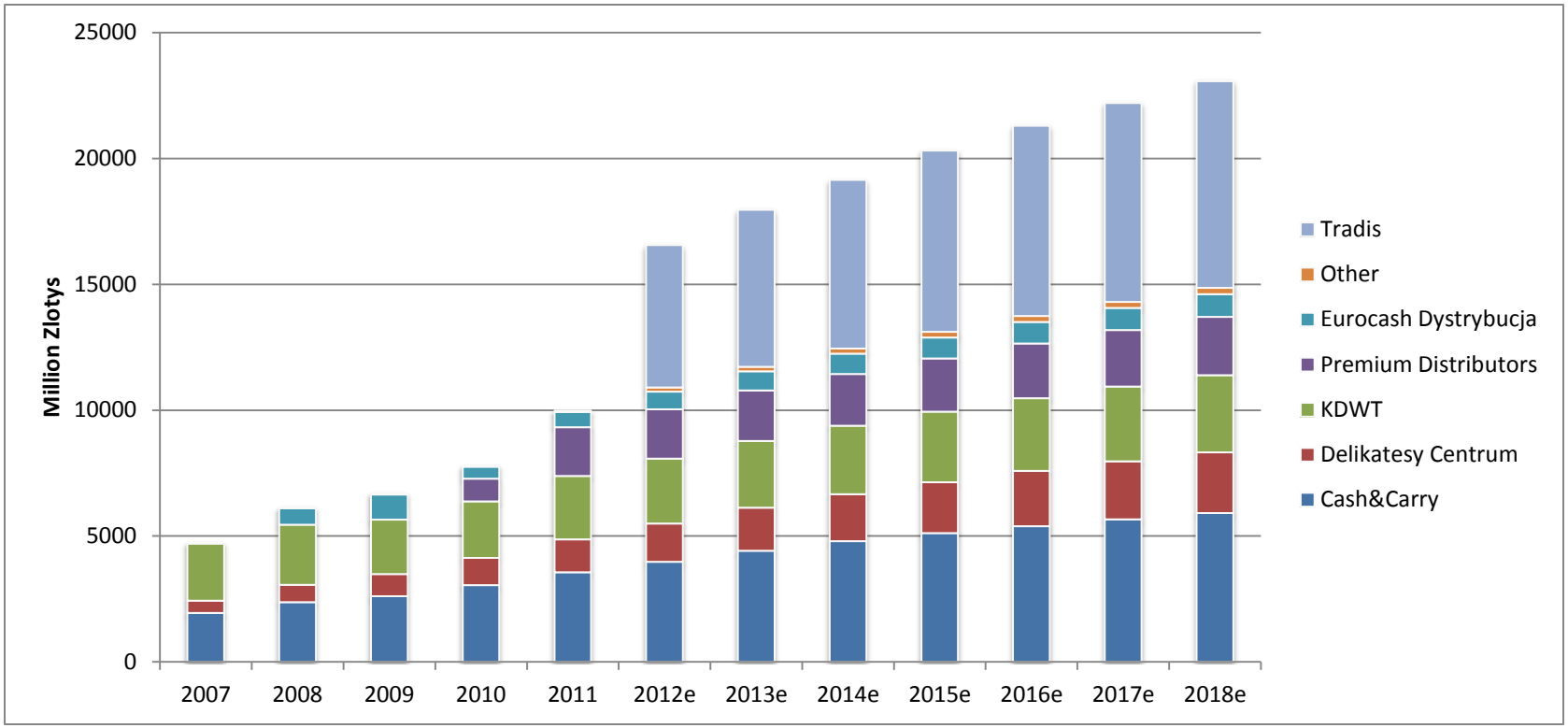
Tradis– Unfortunately Tradis does not have available historical data prior to 2010, and as a result it is impossible to identify any trend in the past years. The revenues' estimation will be based on the strategy defined by the management and some macroeconomic trends. Namely, it will be based on: the growth of the penetration rate of Tradis' franchisee chains (from 25% to 50%); the growth of the wholesale FMCG market and Polish GDP growth.

Other – Given the low importance of this unit, the revenues for 2012 will be based on the growth rate for the first semester of 2012 and for the remaining years the assumption will be based on the CAGR (2007 to 2011), which will be leveled to a slower terminal growth rate in 2018.

The growth rates for the different business units and for the corresponding years are presented in appendix 9.

[15] Polish Central Statistical Office

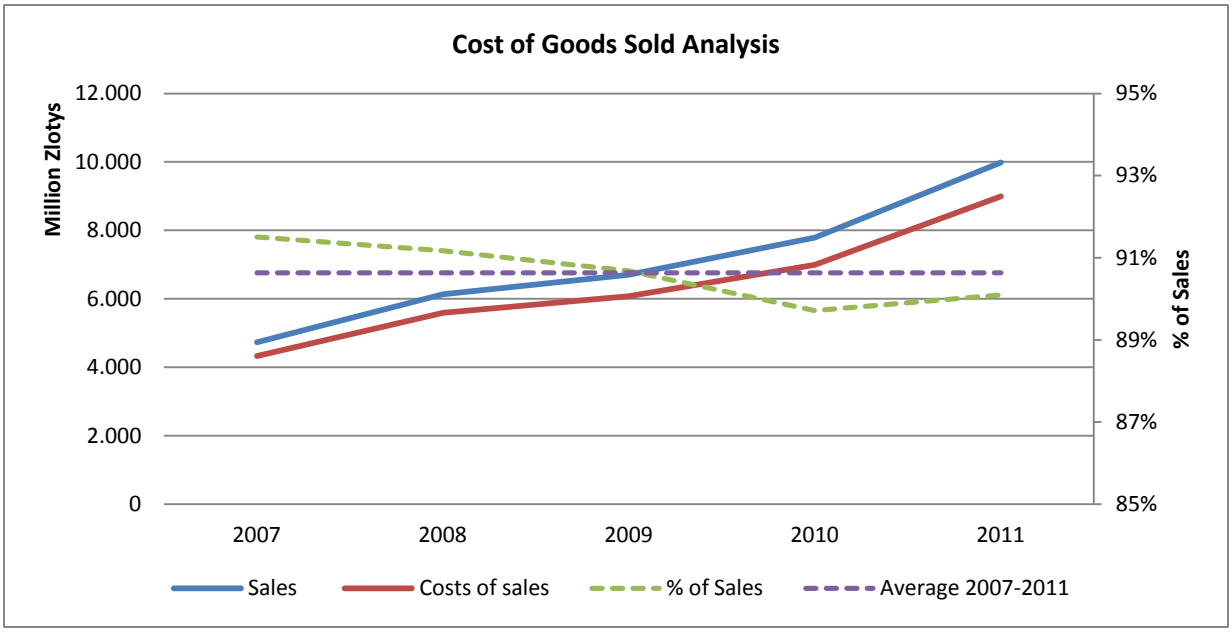
Revenue Estimation (Million Zlotys)



Graph 3: Eurocash Revenue Projection, *Eurocash Annual Reports and Own Projections*

3.4.2 Cost of Goods Sold:

Eurocash's large mix of products sold and the lack of information displayed in the annual report makes it very difficult to project accurate values for this important item of the profit and loss statement. As such, and given that for the past years the relation between cost of goods sold and revenues has been fairly stable (R^2 = 0.9998), I will base my assumption on the average weight of COGS on sales, over the past five years.



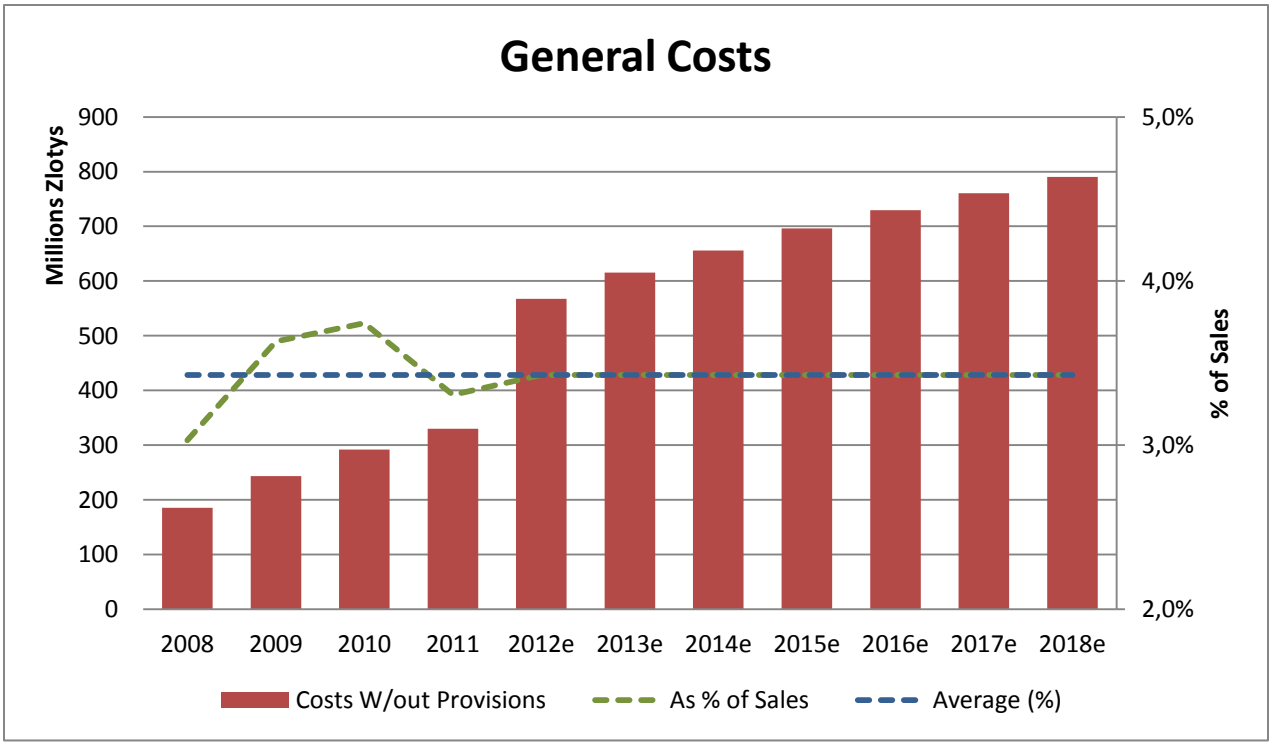
Graph 4: Cost of Goods Sold Analysis, *Eurocash Annual Reports and Own Calculations*

3.4.3 General & Administrative Costs and Provisions

Provisions are not displayed in the P&L statements in a separate manner, which led to the conclusion that these expenses are included in the general & administrative costs. In particular, I assumed that employee benefits provisions were included in "Payroll" and "Social Security" costs, whereas the remaining provision expenses were included in the other items of G&A costs. Afterwards I performed the required transformations in order to separate both items.

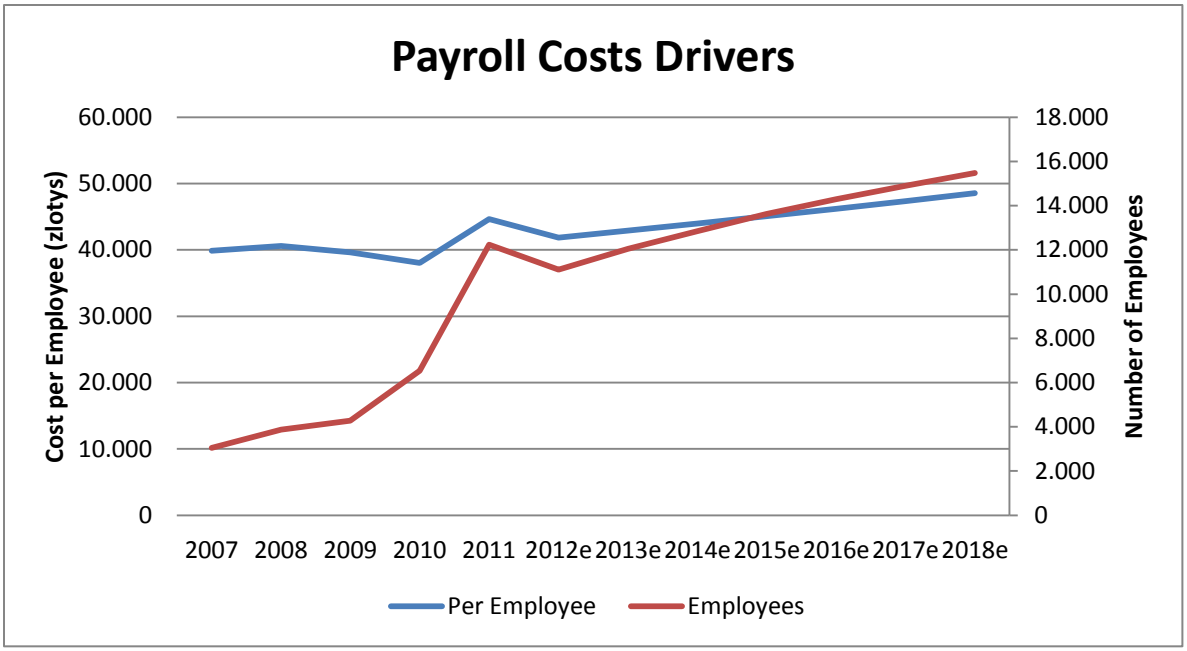
The sum of the following items - *"Materials and Energy"; "External Services"; "Taxes and Charges"; "Other Costs"; "Other operating income"* and *"Other operating expenses*" - accounted historically for less than 5% of the profits. Given this small relevance and the lack of data, I will forecast these

items based on the average weight they had on sales between 2006 and 2011, excluding the respective provision expenses.

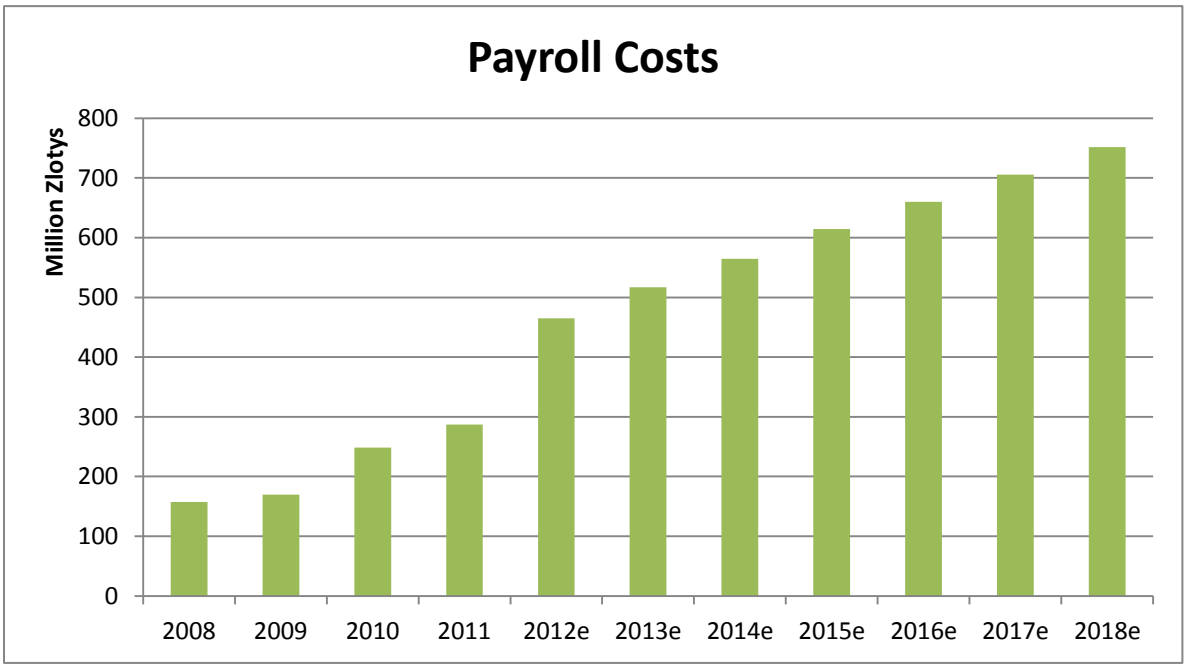


Graph 5: General Costs Analysis and Projection, *Eurocash Annual Reports and Own Projections*

"Payroll" and "Social Security" expenses were forecasted based on the number of employees and the average cost per employee that these expenses have represented in the past five years, capitalized by the forecasted inflation rate. Regarding the number of employees, with the acquisition of Tradis it is expected that part of the workforce might be laid off, however there is no information on the news concerning this topic. As such, my approximation to this was to calculate the average net sales per employee over the past 5 years and assume that this relation will hold up for the following years (Number of Employees = Net Sales / Average net sales per Employee). As a result in 2012 I forecast a reduction on the number of employees. In reality, the adjustment on the work force may take a longer time period; nevertheless it is a fair assumption for the long term, as it is one of the synergies that the company expects to achieve.



Graph 6: Payroll Costs Drivers, *Eurocash Annual Reports and Own Projections*



Graph 7: Payroll Costs, *Eurocash Annual Reports and Own Projections*

Regarding "Provisions" I assumed that the non-current stake would remain unchanged, since there isn't any kind of information regarding its use and future evolution. Current Provisions were assumed to be related with the company's normal activity and were estimated as a percentage of sales.

Current Employee's Benefits were estimated based on the average benefit per employee adjusted by future inflation rates times the number of employees, while long term Employee's Benefits were based on the number of employees employed.

	2007	2008	2009	2010	2011	2012e	2013e	2014e	2015e	2016e	2017e	2018e
General Operating Provisions	**8.068.122**	**17.255.314**	**19.100.248**	**40.695.666**	**114.298.888**	**108.815.361**	**117.993.137**	**125.776.651**	**133.451.162**	**139.937.659**	**145.877.489**	**151.593.043**
As a % of Sales	0,17%	0,28%	0,29%	0,52%	1,15%				0,66%			
Current Employee Benefits (1 x 2)	**11.246.255**	**14.128.606**	**21.622.455**	**15.755.960**	**50.352.605**	**43.415.949**	**48.254.709**	**52.723.817**	**57.339.387**	**61.629.572**	**65.851.655**	**70.142.550**
Provision Per Employee (1)	3.696,99	3.647,03	5.057,88	2.413,23	4.115,79	3.907,34	4.005,03	4.105,15	4.207,78	4.312,98	4.420,80	4.531,32
Employees (2)	3.042	3.874	4.275	6.529	12.234	11.111	12.049	12.843	13.627	14.289	14.896	15.479
Non-Current Employee Benefits	**294.784**	**294.784**	**568.944**	**1.139.941**	**1.663.864**	**1.511.183**	**1.638.640**	**1.746.734**	**1.853.315**	**1.943.396**	**2.025.886**	**2.105.262**
Growth Rate - (Number of Emp.)						-9,2%	8,4%	6,6%	6,1%	4,9%	4,2%	3,9%

Table 3: Provisions Projections, *Eurocash Annual Reports and Own Projections*

3.4.4 Capex and Depreciation

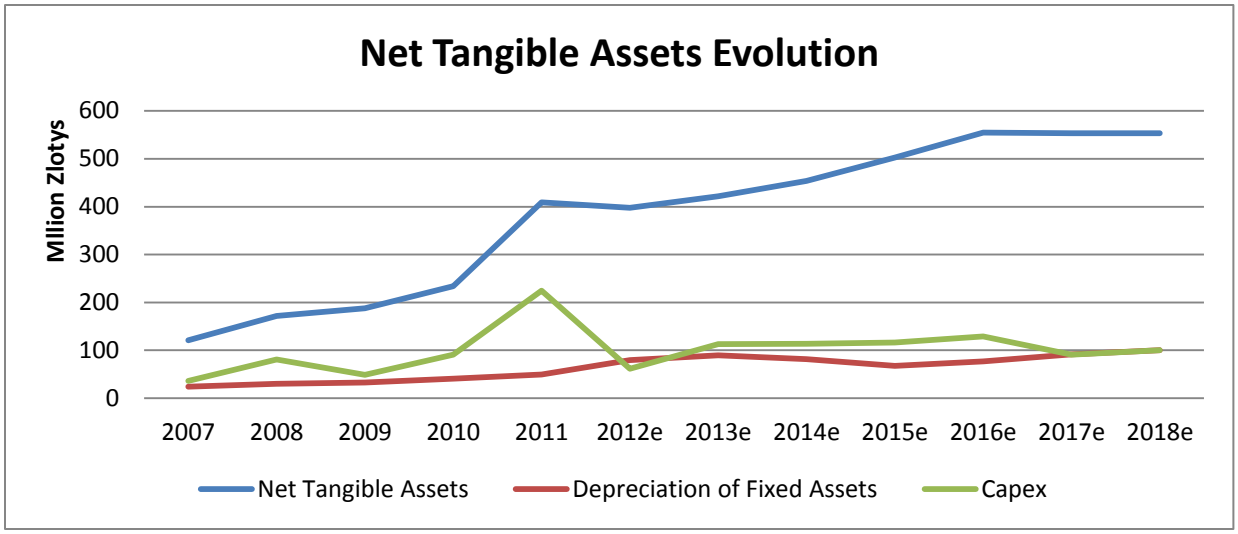
The major driver of Eurocash's Capital Expenditures in the past years has been business combinations, however the company is not expected to make any large acquisitions for the following years. Thus, my estimation for Capex is based on the required expenses to set in place the necessary foundations to support organic growth, which will be obviously much lower than the expenses registered in the past.

As stated before Eurocash growth strategy is based on Like for Like growth, which means an increase in sales but with the same number of stores, and therefore, small investments are expected to be made on Buildings. The only exceptions apply to Delikatesy Centrum which is expected to open 100 stores in 2012 and continue its expansion throughout Poland; and Eurocash Cash & Carry which is expected to open between 6 and 8 stores in 2012.

Regarding other items of fixed tangible assets the underlying rationale is that to support sales growth, infrastructures have to grow in line with it. The growth rate was defined based on historical assets' growth excluding business combinations. This is valid up until cruise speed is

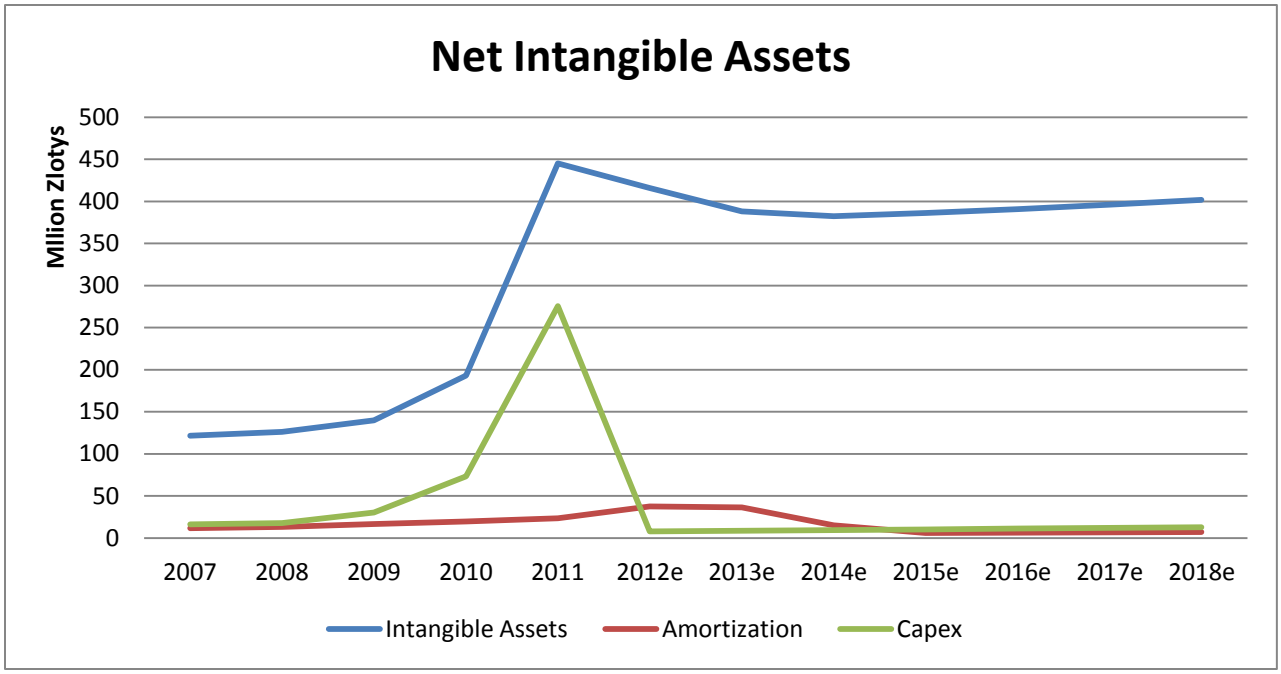
reached, and at that point in time the capacity set in place is assumed to support business level and CAPEX will equalize depreciation for the forthcoming years.

Furthermore, the anti-monopoly Polish office subjected its approval, to Tradis acquisition, to the commitment of Eurocash to sell 12 warehouses on 2012. This one time operation will allow Eurocash to cash in approximately PLN 100 million on 2012 (BRE Bank Report).



Graph 8: Net Tangible Assets Evolution, *Eurocash Annual Reports and Own Projections*

Regarding Intangible Assets, the majority of the value arises from business acquisitions as well. If, once more, business combinations are disregarded, one observes that three particular items – "Know How"; "Customer Relations"; "Trademarks" - are not produced internally; as for "Patents and Licenses" and "Other intangible Assets" the organic growth rate has been of app. 30% per year, however it is not likely that this high growth level will remain. As such I will assume that these items will grow at a rate slightly above amortization (between 3 and 5%).



Graph 9: Net Intangible Assets Evolution, *Eurocash Annual Reports and Own Projections*

As far as depreciation and amortizations are concerned, I used the average depreciation rate for the past five years for each of the assets, and applied it for the forthcoming years. (Appendix 10)

3.4.5 Net Working Capital

Working capital needs relate with operational cash which is tied up in the company under the form of current assets and liabilities as a result of the normal business operations. It is the difference between particular items of current and non-current assets – Trade Receivables; Inventories; Current Tax Assets; Short and Long Term Prepayments and Long Term Receivables[16] – and items of current liabilities – Trade Payables and Current Tax Liabilities.

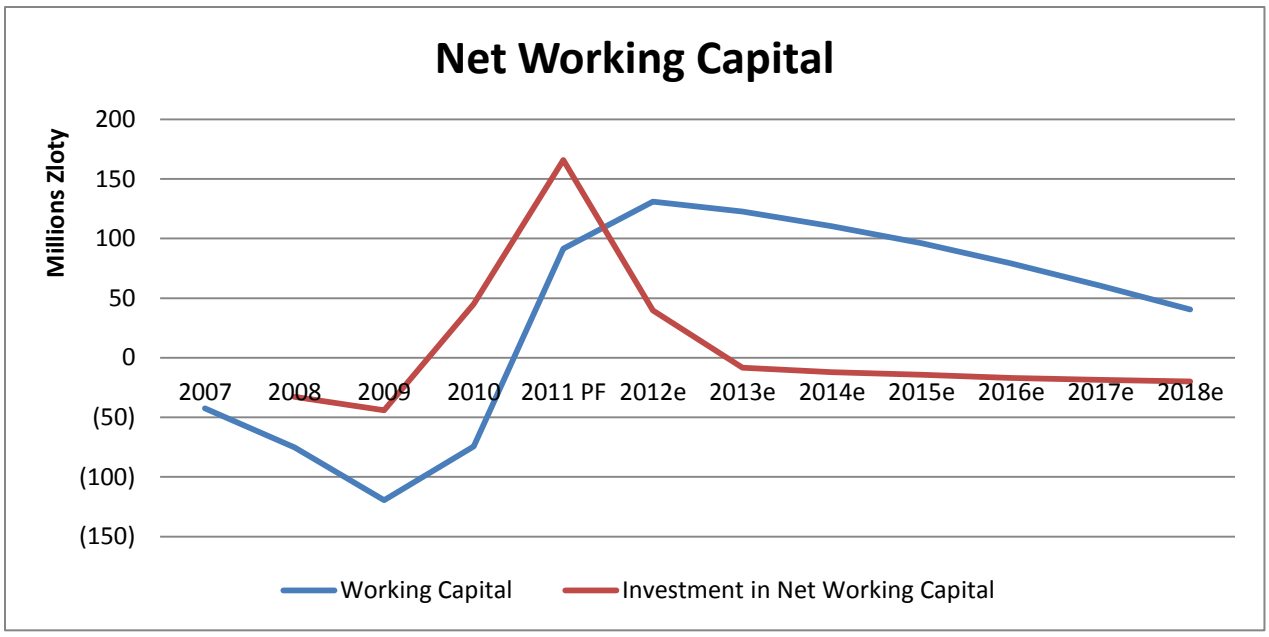
Short and Long Term Prepayments were calculated based on a percentage of general costs. These prepayments accounts, according to the annual report, include mainly: Rent, Electric Energy, Subscription and Telecommunications prepayments. Hence, my assumption was that on average a percentage of general costs are paid in advance.

[16] These non-current assets are considered since by definition these assets are working capital

The remaining assets and liabilities were estimated based on the respective average of Days Receivable and Payable Outstanding and Days Sales of Inventory for the past 5 years. However, some adjustments have to be made due to Tradis acquisition.

This company had a large disparity in terms of Working Capital which has changed completely Eurocash Working Capital Position. Thus, it would have been reckless to assume that the company could collect cash, manage stock and finance with suppliers at the same levels prior to the acquisition.

As such, my approach to this particular problem was to assume that the company will initially display DRO, DPO and DSI, which are an average of the values presented by Eurocash and Tradis in 2011, weighted by the corresponding sales/costs figures (Appendix 11). These values will change along the explicit period until 2018 when it is expected that it will equal the weighted average[17] value for the period 2007 to 2011. The logic supporting this assumption is that the company cannot change immediately the "modus operandi" of Tradis; this transformation has to be gradual along the first seven years.



Graph 10: Net Working Capital Projections, *Eurocash Annual Reports and Own Projections*

[17] Weighted average – 2011 represents 60%; 2010 10% (abnormal year) and 2007-09 range represents 30%

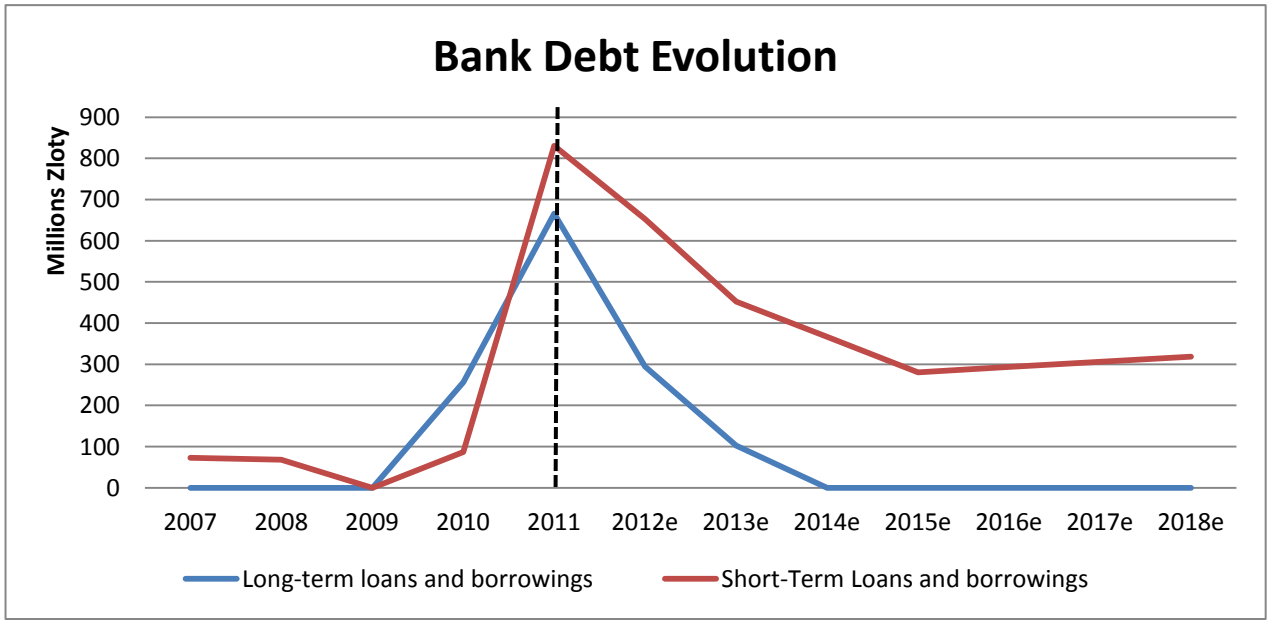
3.4.6 Debt and Interest Payment

Historically Eurocash's debt has been focused on relatively small overdrafts to support normal business operations. However, the latest acquisitions of CEDC and Tradis, on 2010 and 2011, respectively, have drastically changed Eurocash financing structure.

Those acquisitions were almost entirely financed through bank loans and lines of credit, and as a result Eurocash held on its books, on 2011, almost three times more debt than equity, whilst on 2009 the company had no debt.

Nevertheless, this change on the financing structure should be seen as a one-time event and according to the Director of Investor Relations the company intends to go back to previous debt levels. Hence, the company's debt strategy for the forthcoming years is to use free cash flow available to repay acquisition finance debt, while upholding reasonable levels of overdraft facilities to support business activity.

Given this scenario, I have forecasted the debt map for the next few years based on the repayment of the acquisition finance credit facilities and on the maintenance of an overdraft credit facility. Debt repayments were based on the maturities of the loans and the periodicity of the installments. As far as the overdraft is concerned, this credit line was estimated based on an average percentage of sales. The underlying rationale here is that overdrafts are used to support business activity, and, as such, they are intimately related with sales level.



Graph 11: Bank Debt, *Eurocash Annual Reports and Own Projections*

Regarding interest payment, the interest rate for acquisition finance loans are based on WIBOR[18] 3 Months plus a bank spread which is 1.2 percentage points, and for overdrafts it is WIBOR 1 Month plus a bank spread of 0.8 percentage points.

The inexistence of futures on the WIBOR makes it difficult to estimate future spot values for these interest rates. My approach to overcome this problem was threefold:

1. Calculation of the linear regression equation between Euribor 3M and Wibor 3M. The underlying rationale is that, Poland as part of the European Union and on track to be even more integrated with the EU financial market will display an evolution of the inter banking interest rates similar to EURIBOR. It is important to stress, however, that the correlation is not as solid as it is desirable (35%), but given the lack of alternatives I considered it the best approach possible.
2. Given the linear equations, Wibor 3M forecasted interest rates for each quarter were calculated based on the Euribor 3M future contracts. Example below:

Correl	*0,3494*
Intercept	*-3,2614*
Slope	*0,8041*

Linear Regression Wibor 3M vs Euribor 3M

	Maturity Date	Price	Rate
Euribor 3M	19-03-2014	99,8200	***0,1800***

Euribor 3M Contract Example

$$Wibor\ 3M\ -1Q\ 2014 = 4{,}28 = \frac{(0{,}18 - (-3{,}2614)}{0{,}8041}$$

Wibor Calculation

3. Wibor 1M was estimated based on the linear relation between the referred interest rate with Wibor 3M. In this situation, the error occurred was reduced to a minimum given the very high correlation between the two interest rates (97%). The interest rates were calculated through the application of the standard linear regression equation. (Appendix 12)

[18] Warsaw Inter Bank Offer Rate

3.4.7 Tax

Polish tax legislation applies a 19% basic tax to corporate income. Yet, as it is common in other jurisdictions, Polish tax laws allow for deferred tax assets and liabilities which may alter the actual tax paid. Eurocash calculates tax expenses based on the 19% tax rate and the benefits and costs arising from the use of deferred assets and liabilities. My approach to this subject will be similar to what is done by Eurocash. To be precise, I will base tax expenses on the basic tax rate and the use of deferred assets and liabilities. These items were estimated as follows (Appendix 13):

1. Current Tax Assets and Liabilities – Unfortunately it is not explained what are specifically these items, nor it is stated when they are expected to be used. As a result my approach was to empty these accounts in 2012, as it is likely that these benefits and costs will arise in the near future. On the forthcoming years it is impossible to accurately estimate a level for these items, and, thus, these accounts were assumed to be equal to zero.
2. Non-Current Deferred Tax Assets – The benefits arising from tax assets in the past have been strictly correlated with the "contribution of trademarks to Limited Partnership Company", while other deferred tax assets have not actually had any impact on tax estimation. Hence, I will assume the complete use of the aforementioned asset – "contribution of trademarks", whilst the other items remain unchanged.
3. Non-Current Deferred Tax Liabilities – These liabilities are related mainly with permanent accounting differences, as well as, deferred income tax. Regarding permanent accounting differences I forecasted it based on the average value for the past five years. As far as deferred income tax is concerned, given that there is no information when this liability is supposed to fall due, and its importance is relatively small; I assumed its complete payment in 2012 in order to clear this account.

3.4.8 Tradis Synergies

The acquisition of Tradis will allow Eurocash to seize synergies, in terms of costs reduction and sales increase, as a result of scale economies and the application of Eurocash's solid Know-How. In particular, I considered the following synergies to be achieved along 2012 and 2013[19]:

a. Better purchasing agreements as a result of a higher bargaining power, which will decrease the cost of goods sold by approximately PLN 70 million, or between 0,4 and 0,5% improve in gross profit margin. (BRE Bank Report)
b. Costs savings in logistics amounting to a value of PLN 60 million, due to a more efficient logistic network.
c. Working capital release, as a result of better collect and payment time cycles of Eurocash, which it was assumed to occur gradually after 2012.
d. Increase revenues, from improving penetration rate of Tradis franchise chain to levels similar to "abc" franchise

Given the solid expertise of Eurocash management in M&A it is highly expected the accomplishment of the referred synergies, nevertheless it is relevant to perform a sensitivity analysis in the case the company is unable to successfully achieve these benefits.

3.4.9 Dividends and Equity Accounts

As previously explained, Eurocash short term focus is to repay acquisition finance debt. Hence, my assumption regarding dividend payment is that the company will lower dividend payout ratio to repay debt and only afterwards it will distribute cash to shareholders at the previous levels. Given the forecasted free cash flow map I will assume that Eurocash will distribute dividends on 2012 at a significant lower payout ratios – 25%; for 2013 and 2014 the ratio will be similar to the average of the time period between 2007 and 2011 – approximately 50%. For the forthcoming, given the solid cash generation I assumed a higher dividend payout ratio – 75%, as otherwise the company would accumulate an unnecessary vast cash pile. (Appendix 14)

[19] Based on Reports from IDMSA Dom Maklerski and BZWBK

The other items of equity were estimated based on the following guidelines:

a. Non-controlling interests – average value of the past five years;
b. Share Capital – It was assumed that the company would not issue shares or repurchase any shares outstanding, as such share capital value will remain unchanged;
c. The remaining items of equity were assumed to remain unaltered due to its low value and lack of information.

4. Eurocash Valuation

4.1 Valuation Metrics

4.1.1 Cost of Equity - Ke

As aforementioned, cost of equity was calculated based on the CAPM approach (see equation 8). The variables used were the following:

a. **Risk free rate:** Yield of a Polish government bond, maturing in 2023 and paying a coupon of 4%. As stated before, the best solution would be to use a zero coupon bond in order to avoid reinvestment risk. However, at the time, there weren't any active long term zero coupon bonds, and as such this bond is the best approximation for a risk free asset in Polish currency.

b. Levered Beta: This variable was calculated through regressing Eurocash stock monthly returns against the Polish WIG Index monthly returns. Observations date up until January 2009, since by then, investors had completely incorporated the credit crisis impact. As explained in *Chapter 2.2.1.5.3.2* the beta is equal to the slope of *Equation 10*.

c. Equity Risk Premium: Calculation was based on the average historical daily risk premium over the past two years. Historical data for Risk Premium was obtained from Bloomberg, and it is equal to Market Return minus Risk Free Rate, which Bloomberg system considers as the yield of the Polish Government Bond 10 year Index.

Finally, given the results for each variable the final cost of equity for Eurocash is the following:

$$\boldsymbol{Ke = 10.324\% = 4.164\% + 0.774 \times (7.96\%)}$$

4.1.2 Cost of Debt – Kd

Cost of Debt was calculated based on the average interest paid over the total interest bearing debt, previously explained in point 3.4.6.

Year	2012	2013	2014	2015	2016	2017	2018
Average Cost of Debt	**5,70%**	**5,16%**	**5,19%**	**5,37%**	**5,98%**	**6,67%**	**7,08%**

Table 4: Cost of Debt, *Own Calculations and Eurocash IR Department*

The determined cost of debt was then compared with the credit rating of the company, in order to check if the debt nominal value is equal to its market value. Unfortunately, there is no company giving a credit rating to Eurocash. To overcome this obstacle, a credit rating was attributed to the enterprise based on S&P and Damodaran approach. Afterwards, a credit spread, according to the respective rating, was added to the risk free rate in order to reach the cost of debt. These calculations are explained in Appendix 15.

Since the cost of debt reached, under the credit rating approach, was 5.56%, which is very similar to the average cost of debt previously determined, the book value of debt was assumed to be equal to its market value.

4.1.3Unlevered Cost of Equity – Ku

The deleveraging process of the cost of equity calculated in point 4.1.1 is straightforward. It derives from the application of the equations, according to each of the APV models used – *Fernández, Damodaran* and *Extended Miles-Ezzell*. Logically, each of the models used will reach a different Unlevered Cost of Equity, since the deleveraging equation is different between them.

	Fernández	**Damodaran**	**Extended ME**
Ke	10,32%	10,32%	10,32%
Kd	5,70%	5,70%	5,70%
Dt-1	1.496.908.651	1.496.908.651	1.496.908.651
Et-1	3.909.495.134	3.909.495.134	3.909.495.134
Corporate Tax	19%	19%	19%
Rf	4,16%	4,16%	4,16%
Ku	**8,78%**	**8,87%**	**9,04%**

Table 5: Unlevered Cost of Equity, *Own Calculations, Fernández, Damodaran and Nyborg &Cooper*

4.2 APV Valuation

	Fernandez	*Damodaran*	*Extended ME*
Explicit Period Value	**2.468.873.244**	**2.463.608.422**	**2.452.733.217**
Terminal Growth Rate		3,00%	
Terminal FCFF (2019)	503.028.302	503.028.302	503.028.302
Terminal Value	8.701.853.889	8.575.661.404	8.324.720.323
Terminal Discounted Value	**5.251.708.683**	**5.151.332.812**	**4.952.138.938**
Total Vu	**7.720.581.927**	**7.614.941.234**	**7.404.872.155**
Further Adjustements to Vu			
- Debt (2012)		(946.746.569)	
- Financial Liabilities		(59.767.675)	
- Provisions		(115.780.082)	
- Employees Benefits		(44.927.132)	
- Other Long Term Liabilities		(293.305)	
+ Excess Cash and Marketable Securities		141.040.363	
Total	**6.694.107.526**	**6.588.466.833**	**6.378.397.754**
+ PVTS	**(33.149.422)**	**(3.132.170)**	**81.127.267**
+ Expected Bankruptcy Costs	**0**	**(7.502.946)**	**(7.263.719)**
Equity Value	**6.660.958.104**	**6.577.831.717**	**6.452.261.302**
Value per share	**48,35**	**47,75**	**46,84**
Number of shares		*137.754.336*	
Average Value per Share		**47,65**	

Table 6: Eurocash Adjusted Presente Value Valuation, *Own Calculations, Fernández, Damodaran and Nyborg &Cooper*

The total value unlevered expressed above is the sum of the explicit period value and the terminal discounted value.

Explicit period value results from discounting free cash flow to the firm at the appropriate Ku rate, which varies according to the model in use. Terminal discounted value derives from discounting terminal value, which is calculated based on equation 14, at the appropriate Ku rate.

The terminal growth rate was based on macroeconomic factors and other analysts' expectations, as explained in *chapter 2.2.1.5.6.* Namely, it was based on the nominal GDP growth and the average of terminal growth rates expected by analysts. The IMF and the World Economic Outlook states that Polish Nominal GDP is expected to grow at rates over 6% until 2017[20], afterwards no information is provided. On the other hand, analysts built their valuations based on growth rates around 2.5%[21]. Given the sound economic outlook for Poland and the solid ROIC and Sales growth over the past five years for Eurocash, I was slightly more optimistic. Thus, I have considered a growth rate of 3%. Notwithstanding, due to the large impact that growth rates have on valuations, this variable was subject to a sensitivity analysis.

After calculating total Vu there are some adjustments that have to be made in order to reach the final equity value. In particular, it is necessary to deduct debt market value, which, as explained before, it is equal to the nominal value, and other non-equity claims – provisions, other long term liabilities and financial liabilities; Excess cash and other marketable securities should be added to equity value, since, although they do not generate FCFF, the asset itself is cash, which the shareholders are entitled to. Therefore, it has to be taken into account when computing equity value.

Under the Adjusted Present Value framework, to reach final equity value it is still necessary to compute:

I. Present Value of Tax Shields: The calculation of this value derives from the simple application of the formulas laid down on Appendix 1. It is important to note that Fernández and Damodaran approaches express a negative Present Value of Tax Shields. This is a result of the high cost of debt in the two final years of the explicit period, which

[20] Source: http://www.econstats.com/weo/CPOL.htm
[21] IDMSA Dom Maklerski; BZWBK; Wood Co, UBS and CITI Research Notes

increases leverage costs and completely offsets the benefit arising from tax savings. The corresponding calculations are presented in appendix 16

II. Expected Bankruptcy Costs: As noted in point 2.2.5.1.2 this value is dependent on the probability of default and the total bankruptcy cost (Equation 7). The total bankruptcy costs were calculated as 30% of total Vu, for reasons already mentioned. Regarding the probability of default, this variable was based on Moody's methodology, which attributes a likelihood of default based on the credit rating of the company (Appendix 17). It should be stressed that, given that Fernández method already incorporates costs of leverage in the value of tax shields; under this approach it would be redundant to calculate bankruptcy costs.

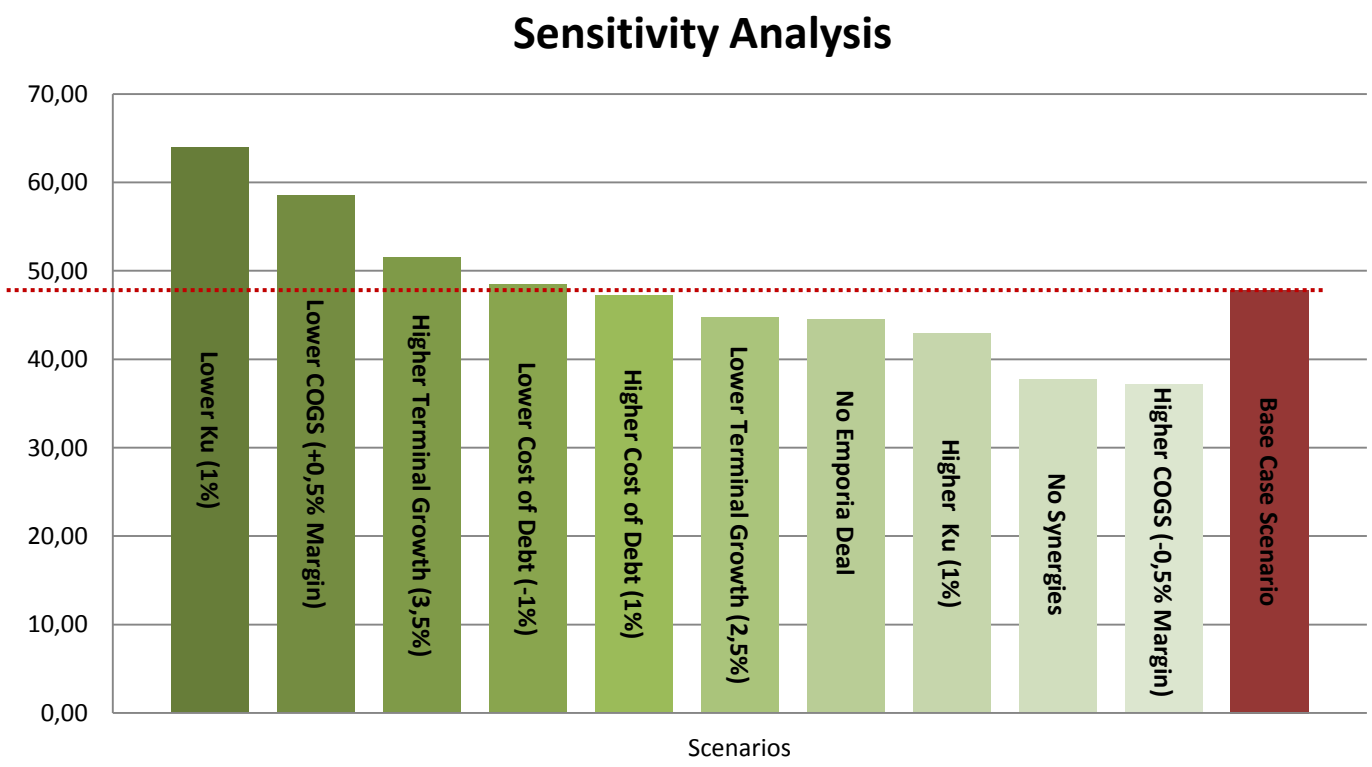
Finally, using the inputs calculated above and on appendix it is possible to proceed with Eurocash valuation for year-end 2012, according to the three mentioned models. As it is expected, due to theoretical differences, each model displayed a different price target, thus my final recommendation regarding price target under APV methodology is an average of the three different values. The price target reached of 47,65 zlotys and the expected dividend yield of 2.91% embodies a 5.5% potential return on investing in the stock. Given this, my final recommendation for Eurocash is to **Hold**[22].

4.3. Sensitivity Analysis

The purpose of this chapter is to test the consistency of Eurocash valuation under different scenarios. The assumptions made may not verify in the future, and as such it is important to understand the range of values for Eurocash in those cases. In particular, the scenarios considered were the following: (1) possible error in synergies estimation; (2) termination of the agreement with Emperia in 2014[23], resulting on a 10% decrease in Tradis sales in 2014; (3) Different cost of goods sold margin; (4) Different costs of Debt, (5) Unleveraged costs of equity and (6) terminal growth rates.

[22] European Securities Network Recommendation System

[23] *"Eurocash will supply the retail part of Emperia's business starting from the date of the deal* [Tradis Acquisition] *for 30 months and the agreement may be terminated by Emperia after 18 months"* – Wood Co Report



Graph 12: Sensitivity Analysis, *Wood Co Research Note, Own Calculation*

As it might be concluded from the graphic displayed above Eurocash valuation is intimately dependent on the cost of goods sold margin assumption and synergies estimation.

The COGS margin is extremely important, since for each zloty sold, over 90 cents (groszy)[24] are absorbed by the merchandise cost. Hence, any minor changes in this margin have large impacts on the company's profitability. In this particular situation, a decrease as small as 0,5% in the margin results in a 22% decrease in the price target.

Synergy impact rationale is intimately related with the COGS margin as well. The valuation developed in this dissertation assumed a 0,45% decrease in the referred margin as a result of better purchasing agreements after the acquisition, which if not met may lead to a share price of 37,76 (-21.1% vs APV valuation).

Yet, even considering that small changes in the variable considered above may have a very large impact on value, the assumptions were made based on: consistent historical results; expert

[24] 1 zloty = 100 groszy

analysts' consensus; and management' expectations. Hence, I do believe the assumptions made are solid and the likelihood of such scenarios can be considered as minimal.

Regarding the termination of the agreement with Emperia, which according to Wood CO could lead to a 10% decrease in Tradis sales in 2014, the impact is limited – 7% decrease in target price. Moreover, the likelihood of such a scenario is hard to predict, as it is only an option and not a certain event. Given this I have decided not to incorporate such considerations in Eurocash valuation.

As it was predictable given the mathematical framework of Eurocash valuation model, the company value is highly sensible to changes in the unleveraged cost of equity, as well as, in the terminal growth rate. Sensitivity to cost of debt is significantly lower, due to the low debt levels assumed at the end of the explicit period. Sensitivity to the aforementioned variables puts on display the previously referred downfalls of a company valuation. Namely, company value can be easily manipulated by using a different theoretical framework to calculate Ku or assuming different terminal growth rates and Kd.

4.4. Multiples Valuation

As pointed in section 2.2.4, a critical step in relative valuation involves the definition of the peer group - similar companies in terms of cash flow, risk and growth profile. In order to so, a wide array (51) of companies was considered (Appendix 18), based on Bloomberg Relative Valuation Module. The selecting criteria for defining the peer group were: Market Capitalization, Sales Growth, EBITDA margin and average Return on Invested Capital. Companies similar to Eurocash in more than three of these criteria were selected to the peer group; Companies similar in only two criteria were subject to a more profound screening and selected based on their resemblance to Eurocash.

Data for the multiples referred in section 2.2.4.3 was extracted from Bloomberg and compiled in the table below. It is important to note that it was not possible to find any information regarding EV/EBITA multiple and an additional multiple was considered – P/FCF. This multiple was incorporated in the analysis, as the value of a company is intimately connected with its cash flow generation capability.

	P/E Current	Estimated P/E[25]	P/FCF	EV/T12M EBITDA	EV/EBITDA Next Year
Eurocash	*34,321*	*20,111*	*15,881*	*18,130*	*12,697*
AXFOOD AB	14,207	13,372	10,167	N/A	6,836
PRICESMART INC	34,013	22,642	60,599	17,389	12,460
BOOKER GROUP PLC	20,062	19,173	24,659	15,192	12,421
CARREFOUR SABA-A	N/A	44,730	N/A	17,307	7,163
SUMBER ALFARIA TRIJAYA	43,422	26,958	N/A	20,005	13,009
MAGNIT	21,955	19,263	N/A	12,502	9,000
O'KEY GROUP SA-GDR REGS	24,580	19,482	N/A	12,222	8,697
DIXY GROUP	54,253	16,574	N/A	9,768	5,709
BIM BIRLESIK MAGAZALAR AS	38,275	29,165	50,156	25,811	19,451
JERONIMO MARTINS	25,490	19,852	N/A	13,457	10,935

Table 7: Peer Group Multiples, *Bloomberg*

The table above reveals that, even though the peer group was defined based on the resemblance of growth and cash flow profiles, companies are not being traded at similar multiples. There is a high dispersion of value within multiples, and in such a scenario it is particularly challenging to perform a multiple valuation, since it is not clear if the companies are being traded in a comparable way. For instance, DIXY Group share price is 54.2x current earnings whereas Eurocash's is only 34.3x. Given this, comparing exclusively with Dixy Group one might say that Eurocash is being traded at approximately half of its value. While, if the comparison was based on AxFood the conclusion would be the opposite - Eurocash is being trade at twice its value.

Even so, and as pointed by Koller et al. (2005b), the use of forward looking multiples, such as P/E estimated and EV/EBITDA next year, normalizes multiple valuation and decreases multiples dispersion. This is actually observable as the dispersion of value is significantly lower when considering these multiples.

Bearing in mind the dispersion of value within each multiple, the harmonic mean was computed and multiple valuation was developed as suggested by Baker and Ruback (1999):

[25] Bloomberg Estimate

	P/E Current	Estimated P/E	P/FCF	EV/T12M EBITDA	EV/EBITDA Nxt Year
Harmonic Mean	26,263	20,886	22,810	14,795	9,367
Denominator	1,3344 Per share	2,258 Per share	2,8839 Per share	398.881.088	564.455.000
Valuation					
Equity Value	4.827.673.778	6.496.459.890	9.061.606.258	5.032.284.824[26]	4.417.979.759
Price Per Share	35,05	47,16	65,78	36,53	32,07
Average			**43,32**		

Table 8: Multiples Harmonic Mean, *Own Calculations and Bloomberg*

According to the relative valuation developed here Eurocash shares are being traded at a premium (46.45 vs 43.32), however there are some considerations that have to be taken into account.

Three of the multiples considered – P/E Current and EV multiples - point that Eurocash current shares are being traded at a premium; whereas Estimated P/E and P/FCF results stat that Eurocash shares are at a discount price.

These heterogeneous results raise an important question, which of these multiples, if any, are correct?

P/FCF multiple is based on few observations (4) due to the lack of data and, therefore, its "odd" results, suggesting a 41% share price increase, should be disregarded.

Current Price/Earnings multiple, on the other hand, displays a large dispersion among the peer group and, as such, its results might be under the influence of abnormal and one-off events (extraordinary income/expenses), which are particularly common in these times of economic turmoil.

EV multiples results might have been distorted due to the low resemblance of the peer group companies with Eurocash in terms of EBITDA margins. Eurocash has displayed consistently over the past 5 years a low EBITDA margin (2.9%) which is shared by only one of the companies considered to the peer group (Booker – 2.3%). Given that EBITDA margins, among the peer group, are considerably higher than Eurocash's it is logical that these multiples display lower values than

[26] Equity Value = Enterprise Value – Debt Market Value – Excess Cash

Eurocash's[27]. To test this hypothesis one might look at Booker multiples and use it to perform the valuation. Under this scenario, Eurocash valuation would have been 37.7 and 44.6, respectively. The higher values suggest that the hypothesis considered is correct, and, as such, EV multiples should be disregard as well.

Finally, estimated P/E multiple yields a price target of 47.16. This multiple is apparently the one with higher adherence to reality, which is related with the lower value dispersion, as estimated earnings are usually normalized and, therefore do not account for extraordinary results. Furthermore, Eurocash shares a high resemblance with the peer group in terms of earnings profile – namely in terms of ROIC and sales growth. The better performance of this multiple corroborates the findings of Liu et al. (2000) and Lie E. & Lie H. (2002).

Thus, as far as Eurocash valuation is concerned the multiple to consider, given its high adherence to reality, is estimated P/E multiple. The similarity between multiple valuation and APV valuation - 47.16 and 47.65 respectively - provides the required foundations to clearly and unequivocally support APV valuation.

[27] $\frac{EV}{EBITDA}$ - higher EBITDA leads to lower multiples

5. Comparison with Research Note

The research note chosen was published by Wood Co, a "leading Investment Bank focused on European Emerging markets", on September 17, 2012. At that time the investment bank had access to the same information has the one used in this dissertation, in particularly, the mid-year results of Eurocash.

Wood research note set a price target of PLN 37.0 for Eurocash, at a time when shares were traded at 43.4, hence the company recommendation was to **Sell.**

In the following chapters it is laid down the underlying reasons for the different price target set by Wood Co.

5.1 Business Fundamentals Differences

	2012e	2013e	2014e	2015e	2016e	2017e	2018e
Revenues							
Thesis	**16553**	**17949**	**19134**	**20301**	**21288**	**22191**	**23061**
Wood Co	16550	17432	17679	18632	19610	20512	21641
Δ	0,0%	3,0%	8,2%	9,0%	8,6%	8,2%	6,6%
EBITDA							
Thesis	**670,0**	**635,6**	**631,7**	**655,3**	**671,1**	**682,3**	**690,7**
Margin	4,05%	3,54%	3,30%	3,23%	3,15%	3,07%	3,00%
Wood Co	483,9	556,1	572,3	607,9	644,5	682,2	720,9
Margin	2,9%	3,2%	3,2%	3,3%	3,3%	3,3%	3,3%
D&A							
Thesis	**110,8**	**125,8**	**96,3**	**73,7**	**83,5**	**98,4**	**107,4**
Wood Co	73,1	87,6	90	95,7	101,6	107,7	114,1
EBIT							
Thesis	**571,9**	**495,7**	**523,0**	**569,2**	**576,7**	**573,7**	**573,2**
Wood Co	384,8	461,1	473,7	503,5	534,8	567,1	600,4
CAPEX							
Thesis	**-69,6**	**-121,9**	**-123,0**	**-126,3**	**-140,1**	**-102,8**	**-113,4**
Wood Co	-93,9	-101,7	-122,1	-125,9	-130,5	-136,3	-142,3
Increase in WC							
Thesis	**-39,6**	**8,4**	**12,2**	**14,3**	**16,9**	**18,6**	**20,0**
Wood Co	86,8	50	52,3	9,3	9,5	9,7	10
FCF							
Thesis	**452,2**	**428,0**	**421,6**	**435,2**	**438,3**	**489,2**	**488,4**
Wood Co	403,7	416,8	412,6	395,7	421,9	447,8	474,5
Δ%	10,7%	2,6%	2,1%	9,1%	3,7%	8,5%	2,8%
Debt Repayment							
Thesis	**-625**	**-428**	**-211**	**-101**	**-2**	**-6**	**-9**
Wood Co	-379	-313	-270	-232	-222		
Dividend Per Share							
Thesis	**0,73**	**1,35**	**1,47**	**2,45**	**2,48**	**2,45**	**2,44**
Wood Co	0,2	0,7	1,2	1,2	1,4		

Table 9: Business Fundamentals Comparison Wood Co and Dissertation Findings, *Own Calculations & Wood Co*

i. **Revenues:** Revenue estimation is in line with Wood's until 2014. From 2014 onwards Wood forecasts on average 8% fewer revenues than this dissertation. The reason for this difference lies on the fact that Wood assimilates a 10% decrease in Tradis sales on 2014 as a result of the rupture of the aforementioned agreement with Emporia.

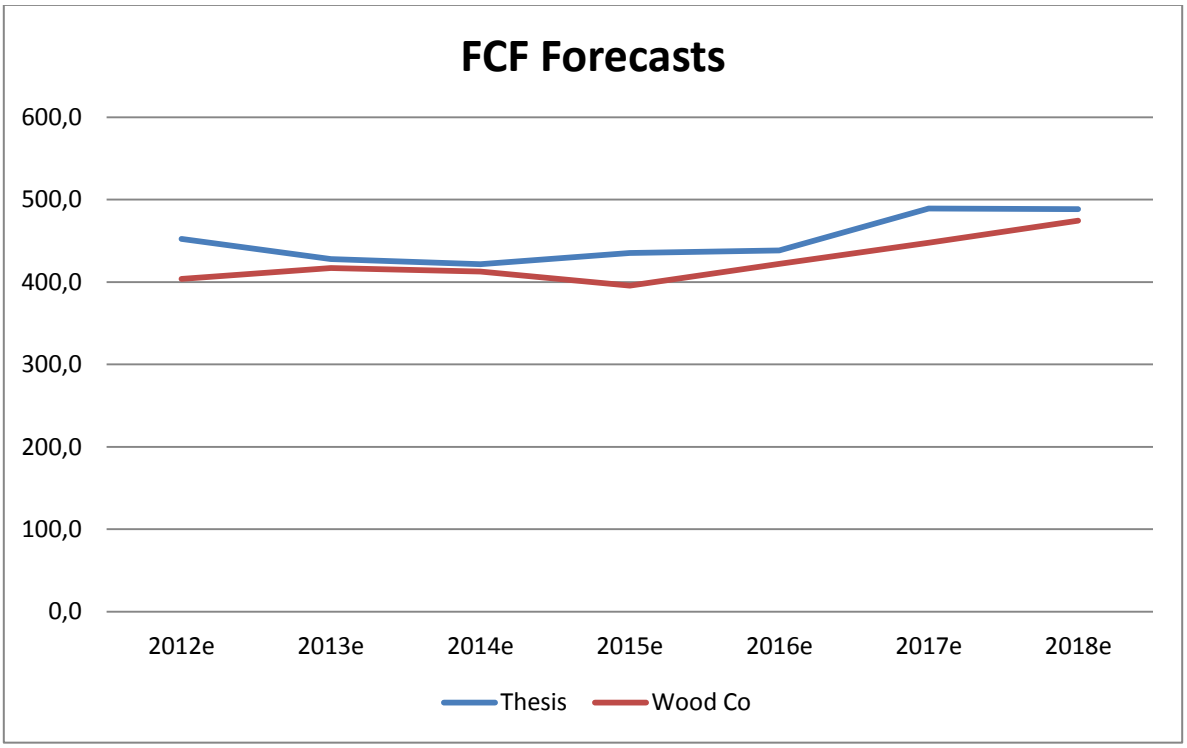
ii. **EBITDA**: EBITDA margins follow very different paths. While this applied project assumes a decreasing EBITDA margin leveling around 2016, Wood assumes an improvement in EBITDA margins. The higher EBITDA margins assumed in the first years is related with the incorporation of synergies arising from Tradis acquisition. The analyst, on the other hand, expresses her distrust regarding the referred synergies – "(…)costs synergies, which may not be delivered in 2012 and may even disappear in the shadow of investments(…)", and, thus, the lower EBITDA margins. However, I consider that the analyst doubts are groundless; Eurocash has a solid track record of M&A and has integrated successfully over the past years companies with considerable sizes. Therefore, I strongly believe that the management expectations regarding synergies will be almost, if not completely, achieved.

iii. **D&A and Capex:** The clear growth path of Wood forecasts regarding D&A and Capex suggests that the analyst has, perhaps, applied a simple ratio or growth pattern, instead of analyzing these items under the light of Eurocash future strategies. Namely, it is not clear that the company's Capex will steadily increase over the following years, since as it is explained in the annual report the company strategy is focused on like for like growth, exception made to Delikatesy Centrum. Therefore, the expectation should be a level of Capex sufficient to support organic growth and the expansion of Delikatesy Centrum throughout Poland, which I assumed to take five years. Regarding **D&A**, Wood expectations are surprisingly low. To support this statement one might look at the results for the first half of 2012: Depreciation expenses amounted to PLN 50 million, almost what Wood expected for the whole year. Starting from an initial value manifestly small, it is natural that future expectations for depreciations are biased.

iv. **Investment in NWC:** The underlying reasons for the accentuated differences between the two equity researches has to do mainly with the assumptions made in terms of DPO; DRO and DSI. Nonetheless, it is extremely odd that Wood displays a negative investment in NWC for 2012, since, as already mentioned, Tradis acquisition has shifted Eurocash position in terms of Working Capital from negative to positive, and, thus, it should be expected an increasing level of Working Capital (Investment).

v. **Debt Repayment:** Wood debt repayment plan is more gradual than the one assumed in this dissertation. The differences in this situation are difficult to explain, since bank loans have defined maturities and installments dates. In addition, Eurocash has reduced its loan position in the first semester 2012 by PLN 293 million, which is almost what Wood had defined for the whole year.

However, as odd as it might be, despite all the differences encountered, Free Cash Flow forecast is quite similar between the two approaches. As such, the reasons for the different price target must be strictly related with the valuation methodology chosen.



Graph 13: FCF Forecasts Comparison, *Own Calculations & Wood Co*

5.2 Valuation Methodology

The table below summarizes the differences between the two valuation approaches.

	Wood Co	Thesis
Methodology Used	Discounted Cash Flows based on WACC	Adjusted Present Value
Cost of Equity	10,30%	10,32%
Risk Free Rate	5,30%	4,16%
Equity Risk Premium	5,00%	7,96%
Levered Beta	1,00	0,77
Cost of Debt	6,30%	Variable -Wibor + Spread
Tax Rate	19%	19%
Discount Rate	WACC variable according to D/E	Ku - according to the theoretical model
Discount Rate Range	8.3% - 10.2%	8.78% - 9.04%
Terminal growth rate	2,50%	3%

Table 10: Valuation Methodologies Comparison Wood Co and Dissertation Findings, *Own Calculations & Wood Co*

As noted in point 2.2.1.4, Luerhman (1997) and Koller et al. (2005) stat that the methodology used by the investment bank should only be used when there is a fixed leverage ratio. Awkwardly Wood admits that there is not a fixed leverage ratio, and values Eurocash following this methodology. To do so the company sets a target debt ratio for each year based on the current equity value. Thus, the debt ratio is defined based on **present** equity values and **future** debt values. This is clearly a non-sense approach, and the ratio computed is meaningless.

Equity Risk Premium and the Levered Beta appear to be defined based on simplistic guesses by the analyst. In particular, the levered beta of 1 is highly unusual, since it would mean that Eurocash is perfectly correlated with the market, which as demonstrated in 4.1.1 is not true. However, despite differences on cost of equity parameters, due to mathematical coincidence, cost of equity is very similar and these variables cannot explain the differences in the two valuations.

Cost of Debt was estimated by the investment bank to be a fixed rate of 6.30%, which contradicts the variable characteristic of the interest rates paid by Eurocash on the loans; however the low debt to capital ratio common to the two approaches and the similarity with the variable rates estimated (5.16% - 7.08%) indicates that differences between cost of debt are not the cause of divergence.

Finally, the largest sources of discord lay on the discount rate and the terminal growth rate. Given the growing pattern of the discount rate, assumed by the analyst, in the last years of the explicit period the WACC amounts to 10.2%. Thus, the terminal value will be discounted at a rate which is 1% higher than the one assumed in this dissertation. Furthermore, the 0.5% lower terminal growth rate has also a large impact on the valuation, as analyzed in point 4.3. The assumptions of the investment bank led to a discounted terminal value of PLN 3.2 billion, while the average discounted terminal value computed under this dissertation framework is PLN 5.2 billion - a PLN 14,5 per share difference.

5.3 Final Considerations on Wood Co Research Note

Wood Co price target of PLN 37.0 reflects a series of simplistic approaches that do not present adherence to reality. In particular, as described above, the analyst has applied assumptions for the business fundamentals which are not coherent with Eurocash's future strategy and has assumed the dissolution of synergies without any evidence pointing in that direction. The investment bank has also based the valuation on a methodology, which evidently shouldn't be utilized in a scenario where capital ratio levels are changing, as defended by several renowned authors. As a result, the WACC was defined based on a poorly constructed debt to capital ratio.

To sum up, the combination of all these procedures and assumptions that go against best practices leads the valuation by Wood Co towards a price target that does not reflect the real value of Eurocash.

6. Conclusion

As observed previously, there is no consensus in state of the art literature regarding valuation models. This advocates a subjective trait on company valuation, evidenced in the dissertation here presented. Even so, it is recognized by the most renowned authors, in this field of expertise, that certain models apply best under certain company characteristics. As such, the work of an equity analyst should not be reduced exclusively to the application of a valuation model; it should also encompass the choice of the theoretical model.

Given the characteristics of Eurocash, and, according to Damodaram (2006) and Koller et al. (2005b), the most appropriate framework, in this situation, is the Adjusted Present Value triangulated by a multiple valuation. However, even though these authors agree on the model, there is few agreement on the deleveraging process and the valuation of tax shields. Hence, I have selected, based on the literature studied, the most fit theoretical models - Fernández with cost of Leverage; Damodaran; and Extended Milles-Ezzel. Naturally, each model displayed a different price target for Eurocash, but given the low dispersion of value among them, (app. 3.2%) the average value poses has an excellent indicator for Eurocash's shares' price target.

Inexplicably, an identical careful approach was not pursued by Wood Co, which as a "leading Investment Bank" is supposed to deliver a professional and high quality work. The analyst has carelessly applied a standard valuation model – WACC based DCF - overlooking the fact that this model is inapplicable under the actual characteristics of Eurocash. Moreover, the analyst has also made a poor job in estimating the variables for the model, using a set of simplistic guesses, even when the information was easily accessible, as was the case of the risk free rate or the leverage beta.

Appendixes

Appendix 1: Calculation of the value of tax shields - Formulas

Nominal Debt value = Debt Market Value

	Extended ME Ruback (1995) | Cooper and Nyborg	Damodaran 1994 (βd = 0)[28]
Cost of Equity (Ke_t)	$Ku_t + \frac{D_{t-1}}{E_{t-1}}(Ku_t - Kd)$	$Ku_t + \frac{D_{t-1}(1-T)}{E_{t-1}}(Ku_t - Rf)$
Beta Levered (β_L)	$\beta u_t + \frac{D_{t-1}}{E_{t-1}}(\beta u_t - \beta d_t)$	$\beta u_t + \frac{D_{t-1}(1-T)}{E_{t-1}} \times \beta u_t$
VTS	$PV\ [\ Ku\ ; D_{t-1} \times T \times Kd]$	$PV\ [\ Ku\ ; D_{t-1} \times T \times Ku - D_{t-1} \times (Kd - Rf)(1-T)]$

Table 11: VTS Formulas, *Fernandez (2007)*

	Fernández Base Scenario	Fernández With Costs-of-Leverage
Cost of Equity (Ke_t)	$Ku_t + \frac{D_{t-1}(1-T)}{E_{t-1}}(Ku_t - Kd_t)$	$Ku_t + \frac{D_{t-1}}{E_{t-1}}[(Ku_t \times (1-T) + Kd_t \times T - Rf]$
Beta Levered (β_L)	$\beta u_t + \frac{D_{t-1}(1-T)}{E_{t-1}}(\beta u_t - \beta d_t)$	$\beta u_t + \frac{D_{t-1}}{E_{t-1}}(\beta u_t \times (1-T) - T \times \beta d_t]$
VTS	$PV\ [\ Ku\ ; D_{t-1} \times T \times Ku]$	$PV\ [\ Ku\ ; D_{t-1} \times (T \times Ku + Rf - Kd)\ ]$

Table 12: VTS Formulas, *Fernandez (2007)*

[28] Damodaran (1994) only provides the formula for computation of β_L the formulas for Ke and VTS are computed by Fernández (2007)

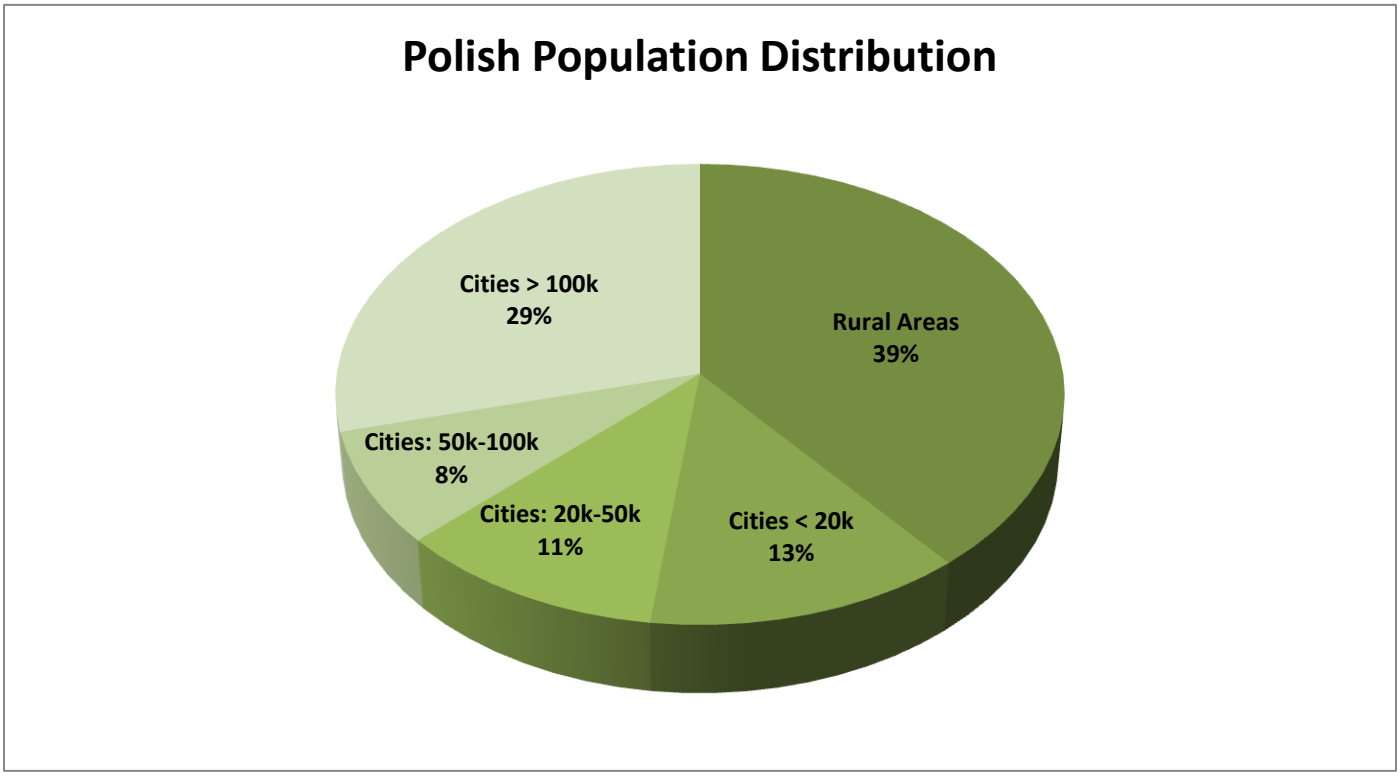
Nominal Debt Value ≠ Debt Market Value

	Fernández	Damodaran 1994 (βd = 0)
VTS	$PV\ [\ Ku\ ; D_{t-1} \times T \times Ku + T \times (N \times r - D \times Kd)]$	$PV\ [\ Ku\ ; T \times N \times r + D \times T \times (Ku - Rf) - D \times (Kd - Rf)]$

	Extended ME Ruback (1995)
VTS	$PV\ [\ Ku\ ; T \times N \times r]$

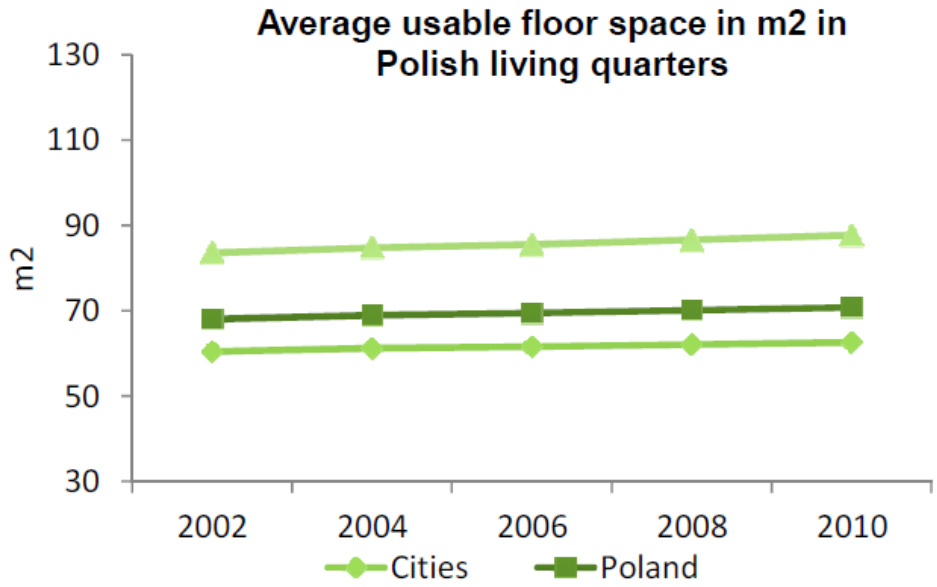
Tables 13 & 14: VTS Formulas, *Fernandez (2007)*

Appendix 2: Polish population Distribution Urban/Rural



Graph 14: Polish Population Distribution, *Eurocash Investor Relation Presentation*

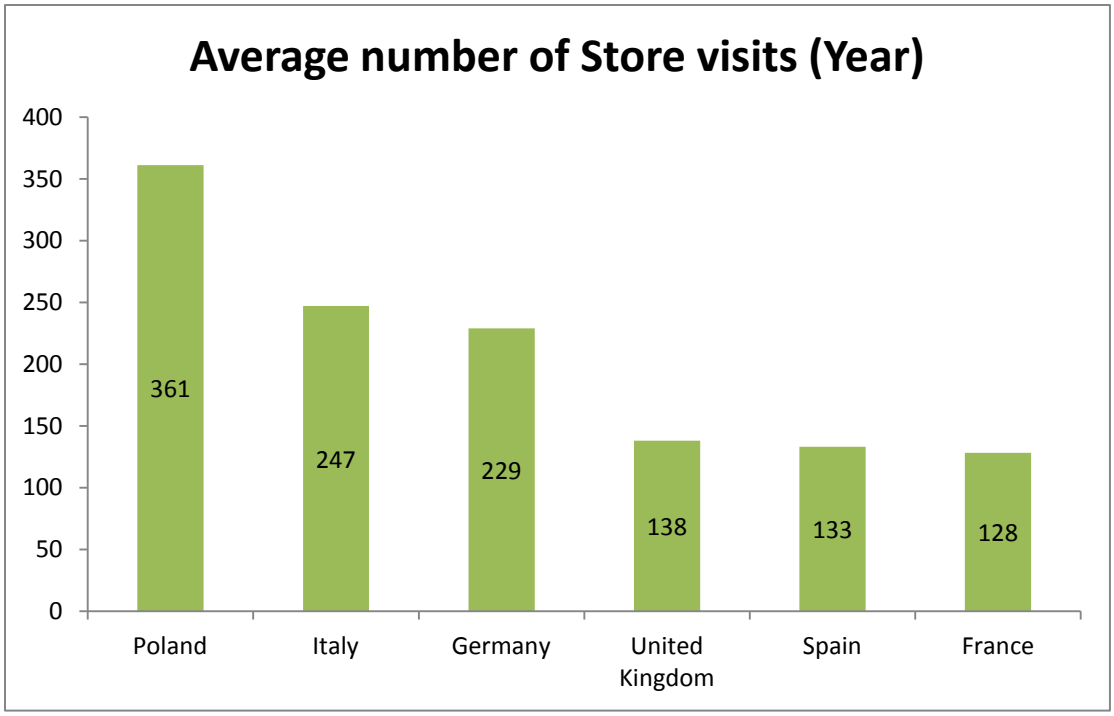
Appendix 3: Small Living quarters - no space to store food



Graph 15: Polish Average Usable Floor Space, *Eurocash Investor Relation Presentation*

As it can be seen on the graph above, in 2010 the average usable floor space in Polish cities was of 65 m^2 approximately. In Italy it is over 90 m^2. The small living quarters developed a need for a high frequent shopping as there is few space to store food.

Appendix 4: High shopping frequency in Poland



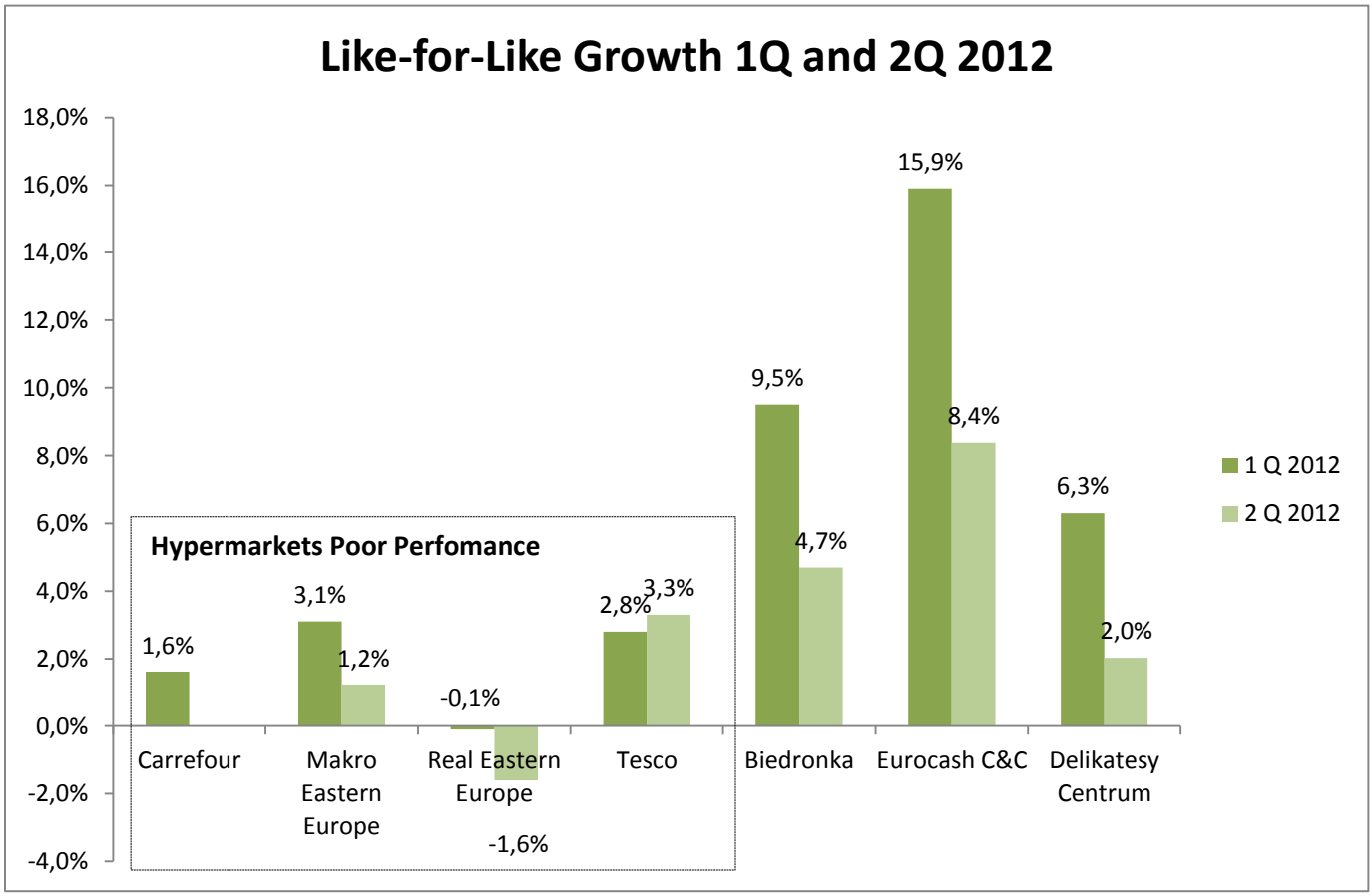
Graph 16:Average Annual Store Visits in Europe, *Eurocash Investor Relation Presentation*

Appendix 5: Retail Sales Cyclicity

Graph 17: Historical Monthly Turnover of Polish Retail Sale Enterprises, *Polish Central Statistical Office (2010)*

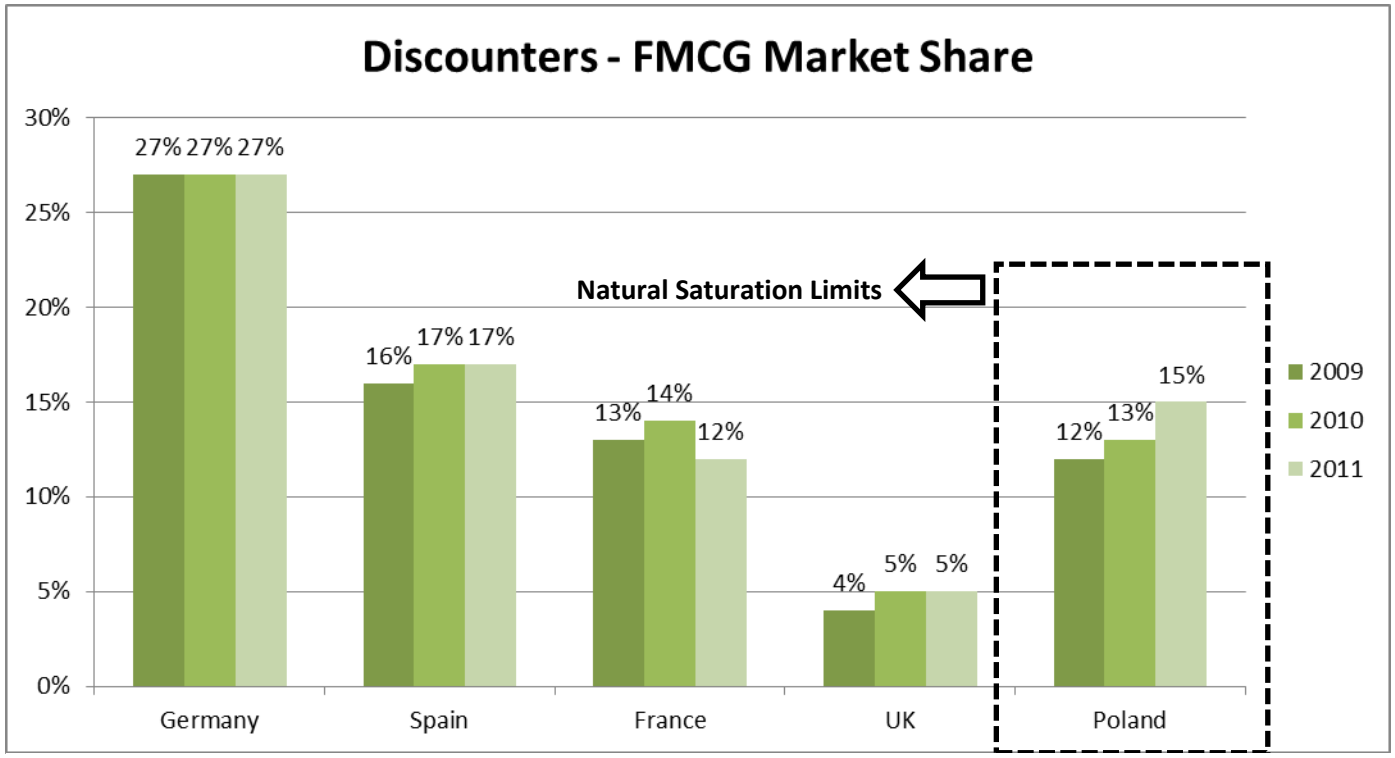
The analysis of the following graphic makes it clear that this industry indeed experiences a cycle. The cycle can be described by lower sales volume in the first two months of the year, stabilizing throughout the year until December when there is a sales peak. As previously stated, the fact that the cycle occurs within a one year time frame, turns it unnecessary to proceed to any adjustments.

Appendix 6: No Hope for Hypers



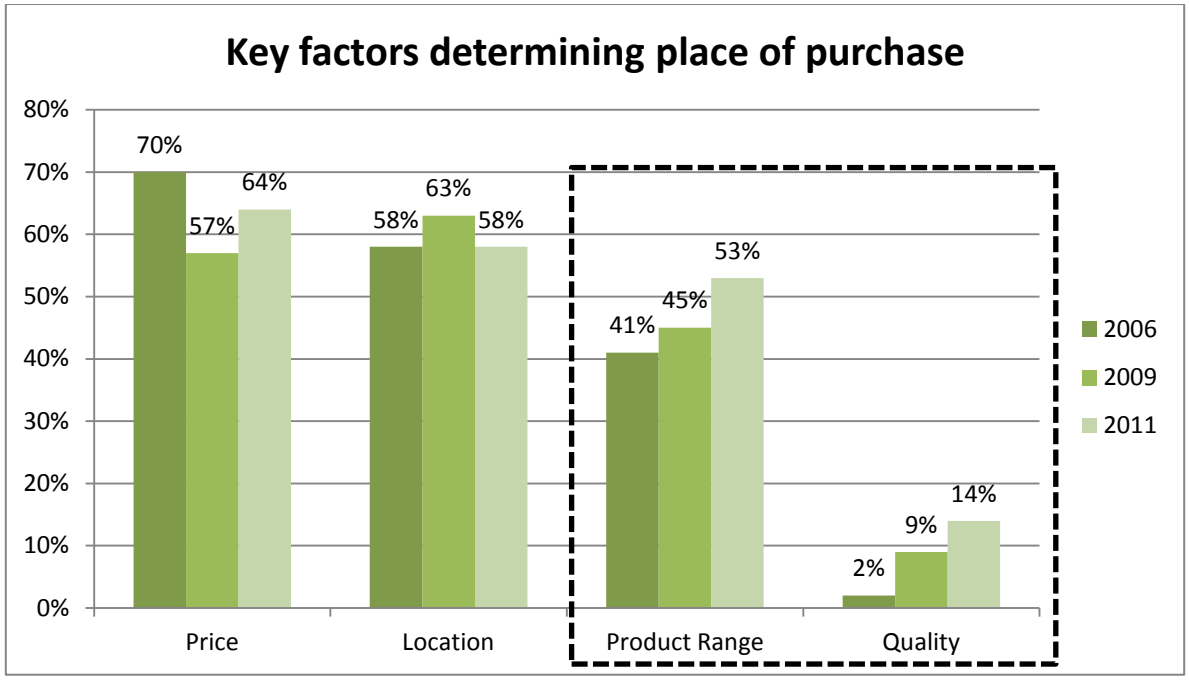
Graph 18: Like-for-Like Growth FMCG Companies 1st Semester of 2012, *Eurocash Investor Relation Presentation*

Appendix 7: Discounters reaching natural saturation limits.



Graph 19: FMCG Discounters Market Share in Europe, *Eurocash Investor Relation Presentation*

Appendix 8: Polish Consumers shift of behavior



Graph 20: Polish Consumer Preferences regarding Place of Purchase, *Eurocash Investor Relation Presentation*

Appendix 9: Business Units Growth Rates

Growth Assumptions	CAGR 2011 - 07	2012	2013	2014	2015	2016	2017	2018
Cash&Carry	12,91%	11,62%	11,00%	8,82%	6,61%	5,29%	5,00%	4,50%
Delikatesy Centrum	21,48%	16,49%	13,14%	8,26%	8,48%	8,68%	5,00%	4,73%
KDWT	2,17%	2,17%	2,50%	3,00%	3,00%	3,00%	3,00%	3,00%
Premium Distributors	N/A	1,83%	2,00%	2,50%	3,00%	3,00%	3,00%	3,00%
Eurocash Dystrybucja	-2,21%	15,00%	10,00%	5,00%	4,00%	3,00%	3,00%	3,00%
Other	15,29%	161,10%	12,50%	10,00%	7,50%	4,00%	3,00%	3,00%
Tradis	N/A	10,00%	10,00%	7,50%	7,50%	5,00%	4,50%	4,00%
Total	16,11%	65,85%	8,43%	6,60%	6,10%	4,86%	4,24%	3,92%

Table 15: Business Units Growth Rates Estimation, *Own Projections*

Appendix 10: Depreciation & Amortization Rates

Depreciation Rate	2007	2008	2009	2010	2011	Annual Report	Actual Average
Land and Buildings	7,6%	8,5%	8,1%	8,5%	7,1%	2,5% - 4,5%	8,0%
Plant and Equipment	19,1%	18,5%	12,4%	11,7%	12,4%	10%-60%	14,8%
Vehicles	18,4%	27,8%	15,4%	17,5%	16,7%	14-20%	19,2%
Other Fixed Assets	22,0%	17,3%	14,0%	15,9%	15,9%	20,0%	17,0%
Assets Under Construciton	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%

Table 16: Depreciation Rates of Tangible Assets, *Eurocash Annual Reports and Own Calculations*

The estimation of future depreciation expenses was based on actual averages for all types of Fixed Tangible Assets.

Amortization Rate						Annual Report	Actual Average
Patents and licences	28,3%	19,9%	19,0%	26,2%	22,8%	2,5% - 4,5%	23,2%
Know how	10,0%	10,0%	10,0%	10,0%	10,0%	10%-60%	10,0%
Trademarks	1,8%	1,8%	1,8%	1,5%	1,5%	14-20%	1,7%
Customer relations	N/A	N/A	N/A	N/A	0,0%	20,0%	0,0%
Other intangible assets	39,9%	20,8%	21,0%	15,8%	15,4%	0,0%	22,6%

Table 17: Amortization Rates of Intangible Assets, *Eurocash Annual Reports and Own Calculations*

The estimation of amortization expenses for new Patents and Licenses and Other Intangible Assets was based on the Annual Report amortization rate. All other intangible assets were amortized at the actual average rate.

Appendix 11: Net Working Capital

Eurocash	2007	2008	2009	2010	2011*	Weighted Value	2012e	2013e	2014e	2015e	2016e	2017e	2018e
Trade receivables and other short term receivables	253.360.174	378.930.814	405.062.449	726.235.870	891.747.903								
Days Receivable Outstanding	**19,94**	**23,13**	**22,65**	**35,18**	**33,75**	**35,13**	**34,54**	**33,95**	**33,38**	**32,81**	**32,25**	**31,71**	**31,17**
Trade Payables and other short term Payables	521.324.148	773.549.327	886.453.131	1.453.976.404	1.623.821.784								
Days Payable Outstanding	**44,19**	**50,76**	**53,44**	**75,95**	**65,94**	**61,55**	**61,23**	**60,91**	**60,60**	**60,29**	**59,98**	**59,67**	**59,36**
Inventories	224.861.218	312.265.130	365.785.193	634.924.788	604.396.619								
Days Sales of Inventories	**19,06**	**20,49**	**22,05**	**33,16**	**24,54**	**25,52**	**25,41**	**25,31**	**25,20**	**25,10**	**25,00**	**24,89**	**24,79**

Table 18: Estimation of Days Receivable Outstanding; Days Payable Outstanding and Days Sales of Inventories, *Own Calculations and Eurocash Annual Reports*

	DRO	Sales	**Weighted Value**
Tradis	37,82	5.147.660.000	**35,13**
Eurocash	33,75	9.980.595.900	
	DPO	COGS	
Tradis	53,04	4.642.344.589	**61,55**
Eurocash	65,94	8.992.235.676	
	DSI	COGS	
Tradis	27,42	4.642.344.589	**25,52**
Eurocash	24,54	8.992.235.676	

Table 19: Calculation of Tradis and Eurocash Weighted Value for DRO; DPO and DSI, *Own Calculations*

Formulas	Weighted Average (2007-11)	CAGR
(Trade Receivables / Sales of Goods) x 365	31,17	-1,7%
(Trade Payables / Cost of Goods Sold) x 365	59,36	-0,5%
(Average Inventory /Cost of Goods Sold) x 365	24,79	-0,4%

Table 20: Calculation of Eurocash Weighted Average for DRO; DPO and DSI – time period 2007/11, *Own Calculations*

The estimation of DRO; DPO and DSI for the explicit period was based on an initial value, which is an weighted average of the respective values for Tradis and Eurocash (Table 19), leveling to a final value in 2018, which is an weighted average of Eurocash's DRO, DPO and DSI for the time interval 2007 to 2011[29] (Table 20). The leveling rate was estimated as the Compound Annual Growth Rate required for the initial value to reach the final value from 2011 to 2018 (Table 20).

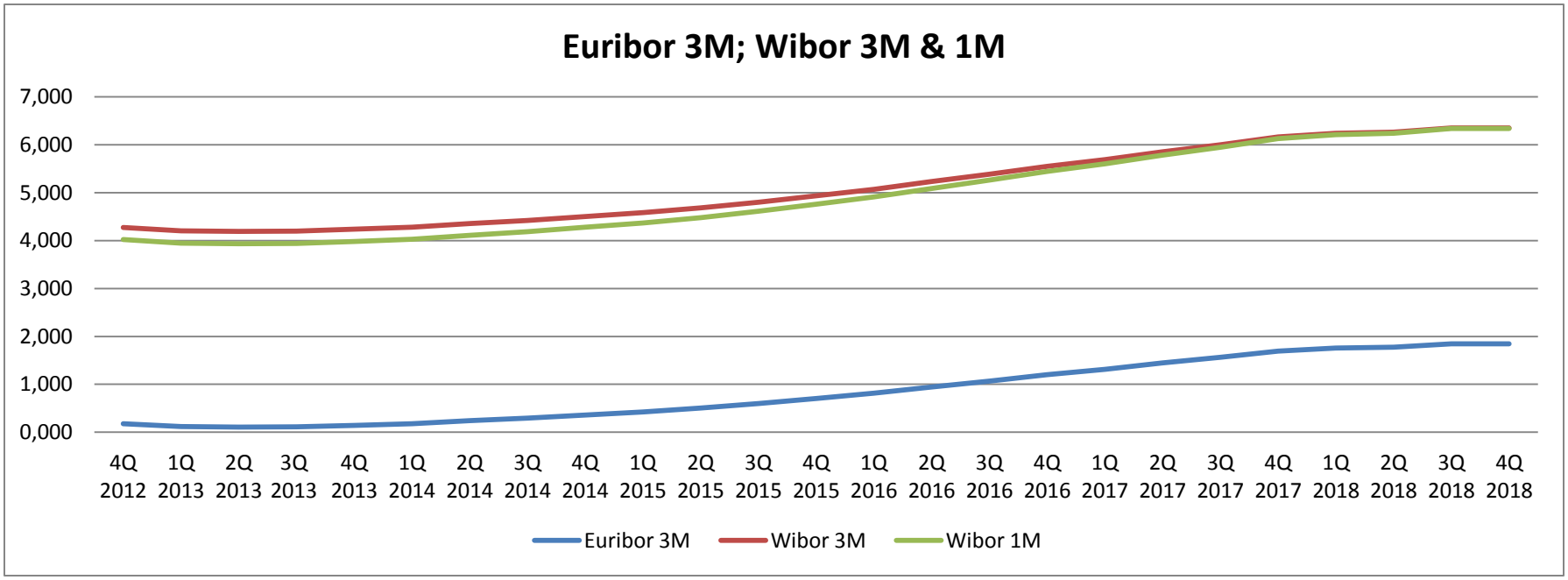
The logic behind this procedure is related with the fact that Eurocash cannot change immediately collection, payment and inventory days of Tradis, it has to be a gradual change.

[29] The reason for a weighted average is related with the fact that 2010 was an abnormal year and therefore its weight on target DPO; DRO and DSI has to be considerably smaller.

Appendix 12: Wibor 3M and Wibor 1M

	2012		2013				2014				2015				2016				2017				2018			
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Acquistion Finance - WIBOR 3M	*4,96%*	*4,27%*	*4,21%*	*4,19%*	*4,20%*	*4,24%*	*4,28%*	*4,35%*	*4,42%*	*4,50%*	*4,58%*	*4,68%*	*4,80%*	*4,93%*	*5,07%*	*5,23%*	*5,39%*	*5,55%*	*5,69%*	*5,85%*	*6,00%*	*6,16%*	*6,24%*	*6,26%*	*6,35%*	*6,35%*
Overdrafts - WIBOR 1M	*4,91%*	*4,02%*	*3,95%*	*3,93%*	*3,94%*	*3,98%*	*4,03%*	*4,11%*	*4,19%*	*4,28%*	*4,37%*	*4,48%*	*4,61%*	*4,76%*	*4,91%*	*5,09%*	*5,26%*	*5,44%*	*5,60%*	*5,78%*	*5,95%*	*6,13%*	*6,21%*	*6,24%*	*6,34%*	*6,34%*

Table 21: Wibor 3M and Wibor 1M Estimative Based on Euribor 3M Future Rates, *Own Calculations and Bloomberg*



Graph 21: Euribor 3M, Wibor 3M & 1M Spot Rates Estimative, *Own Calculations and Bloomberg*

Appendix 13: Tax

Eurocash	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Profit Before Tax	**74.910.181**	**94.687.390**	**128.772.446**	**145.337.644**	**150.991.176**	**496.849.749**	**459.160.388**	**500.062.765**	**554.669.100**	**561.471.530**	**555.178.451**	**552.382.485**
Tax @ 19%	(14.232.934)	(17.990.604)	(24.466.765)	(27.614.152)	(28.688.323)	(94.401.452)	(87.240.474)	(95.011.925)	(105.387.129)	(106.679.591)	(105.483.906)	(104.952.672)
Permanent Tax Differences	(2.152.566)	(1.163.938)	(2.526.599)	(2.805.588)	(3.012.899)	(2.332.318)	(2.332.318)	(2.332.318)	(2.332.318)	(2.332.318)	(2.332.318)	(2.332.318)
Deferred Income Tax Liability						(12.453.736)						
Allowance Deferred Tax Assets		2.866.549	807.204	13.376.208	16.204.377	13.396.719	13.396.719	6.009.338	0	0	0	0
Other Differences	76.182	(31.905)	(64.515)	152.308	(1.107.142)	(195.014)	(249.254)	(292.723)	(338.365)	(436.500)	(302.371)	(323.843)
Effective Tax	**(16.309.318)**	**(16.319.898)**	**(26.250.675)**	**(16.891.224)**	**(16.603.987)**	**(95.985.802)**	**(76.425.326)**	**(91.627.629)**	**(108.057.812)**	**(109.448.408)**	**(108.118.595)**	**(107.608.833)**
Rate	-21,8%	-17,2%	-20,4%	-11,6%	-11,0%	-19,3%	-16,6%	-18,3%	-19,5%	-19,5%	-19,5%	-19,5%
Net Non Current Deferred Tax Assets	**0**	**3.996.664**	**6.124.488**	**18.267.406**	**38.448.115**	**25.051.396**	**11.654.677**	**5.645.339**	**5.645.339**	**5.645.339**	**5.645.339**	**5.645.339**
Arising From Partnership					*32.802.776*	*19.406.057*	*6.009.338*	*0*	*0*	*0*	*0*	*0*
Net Non Current Deferred Tax Liabilities	**5.374.916**	**7.402.804**	**8.947.803**	**8.408.365**	**36.685.781**	**21.704.713**	**19.123.141**	**16.498.100**	**13.827.417**	**11.058.599**	**8.423.910**	**5.767.749**
Deferred Income tax Liability					*12.453.736*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Auxiliar Calculations												
Permanent Tax diferences/ Tax @ 19%	15,1%	6,5%	10,3%	10,2%	10,5%							
Average			(2.332.318)									

Table 22: Tax Accounts Estimation, *Eurocash Annual Reports and Own Calculations*

Appendix 14: Dividend Projection

Eurocash	2012e	2013e	2014e	2015e	2016e	2017e	2018e
Dividends Payment							
Payout Ratio	25%	50%	50%	75%	75%	75%	75%
Dividend Payment	100.612.074	185.959.957	202.525.420	336.961.478	341.093.955	337.270.909	335.572.360
Net Income	402.448.297	371.919.914	405.050.839	449.281.971	454.791.939	449.694.545	447.429.813
DPS	0,73	1,35	1,47	2,45	2,48	2,45	2,44
Dividend Yield	**1,57%**	**2,91%**	**3,17%**	**5,27%**	**5,33%**	**5,27%**	**5,24%**

Table 23: Dividend Projection, *Own Projections*

Appendix 15: Credit Rating

Eurocash	2007	2008	2009	2010	2011
Financial Risk					
FFO/Total Debt (3year Average)	129,3%	177,5%	177,5%	144,4%	42,4%
	Minimal	Minimal	Minimal	Minimal	Intermediate
Debt Leverage (3year Average)	23,9%	21,7%	14,4%	20,8%	38,7%
	Minimal	Minimal	Minimal	Minimal	Intermediate
Total Debt / EBITDA (3year Average)	0,60	0,52	0,34	0,64	2,37
	Minimal	Minimal	Minimal	Minimal	Intermediate
Average Financial Risk	Minimal	Minimal	Minimal	Minimal	Intermediate
Business Risk			Strong		
Rating according to S&P	AA	AA	AA	AA	A-
EBIT Interest Coverage Ratio (3y moving average)	7,38	8,22	8,17	7,74	6,26
Rating according to Damodaran	AA	AA	AA	AA	A+
Company Rating (Two models considered)	AA	AA	AA	AA	A
				Spread	1,40%
				Risk Free Rate	4,16%
				Cost of Debt	***5,56%***

Table 24: Eurocash Credit Rating Calculation, *Own Projection; S&PCorporate Ratings Criteria 2006 and Damodaran 2012*

Rating Matrix

	Financial risk Profile				
Business risk profile	**Minimal**	**Modest**	**Intermediate**	**Aggressive**	**Highly leveraged**
Excellent	AAA	AA	A	BBB	BB
Strong	AA	A	A-	BBB-	BB-
Satisfactory	A	BBB+	BBB	BB+	B+
Weak	BBB	BBB-	BB+	BB-	B
Vulnerable	BB	B+	B+	B	B-

Financial risk indicative ratios	**Minimal**	**Modest**	**Intermediate**	**Aggressive**	**Highly leveraged**
Funds from operations/Debt (%)	Over 60	45–60	30–45	15–30	Below 15
Debt leverage (Total debt/Capital) (%)	Below 25	25–35	35–45	45–55	Over 55
Debt/EBITDA (x)	<1.4	1.4–2.0	2.0–3.0	3.0–4.5	>4.5

Table 25: Rating Matrix for Credit Rating, *S&P Corporate Ratings Criteria 2006*

If Rating is	*Spread is*
D	12,00%
C	10,50%
CC	9,50%
CCC	8,75%
B-	6,75%
B	6,00%
B+	5,50%
BB	4,75%
BB+	3,75%
BBB	2,50%
A-	1,65%
A	1,40%
A+	1,30%
AA	1,15%
AAA	0,65%

Table 26: Credit Spread for Large Manufacturing Firms, *Damodaran Ratings*

Note: Business risk was classified as strong which is in accordance with S&P classification for "Branded Non-Durable Consumer Products" companies, which is the case of Eurocash.

Appendix 16: Present Value of Tax Shields

Variables		**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
Debt		1.496.908.651	946.746.569	554.856.707	366.543.379	280.332.920	293.958.718	306.436.167	318.442.491
Corporate Tax									19%
Rf									4,16%
Kd			5,70%	5,16%	5,19%	5,37%	5,98%	6,67%	7,08%
Fernandez Approach VTS									
Explicit Period VTS			2.041.968	6.397.231	3.550.818	1.694.120	(404.531)	(2.451.215)	(3.829.468)
Terminal Period VTS									(68.233.090)
Discount Rate (Ku)			**8,78%**						
Year (t - 2012)			0	1	2	3	4	5	6
Discount Factor			1,000	0,919	0,845	0,777	0,714	0,657	0,604
Discounted VTS									
Explicit Period			2.041.968	5.880.851	3.000.715	1.316.099	(288.898)	(1.609.245)	(2.311.146)
Terminal Period									(41.179.767)
PVTS		**(33.149.422)**							
Damodaran Approach									
Explicit Period VTS			6.640.879	8.335.802	4.724.643	2.593.360	606.246	(1.006.174)	(2.080.991)
Terminal Period VTS									(36.541.179)
Discount Rate (Ku)			**8,87%**						
Year (t - 2012)			0	1	2	3	4	5	6
Discount Factor			1,000	0,919	0,844	0,775	0,712	0,654	0,601
Discounted VTS									
Explicit Period			6.640.879	7.656.954	3.986.450	2.009.967	431.602	(657.986)	(1.250.035)
Terminal Period									(21.950.001)
PVTS		**(3.132.170)**							
Extended ME									
Explicit Period VTS			16.200.383	9.276.128	5.474.124	3.740.057	3.183.438	3.723.306	4.123.446
Terminal Period VTS									70.286.958
Discount Rate (Ku)			**9,04%**						
Year (t - 2012)			0	1	2	3	4	5	6
Discount Factor			1,000	0,917	0,841	0,771	0,707	0,649	0,595
Discounted VTS									
Explicit Period			16.200.383	8.506.886	4.603.863	2.884.628	2.251.707	2.415.172	2.452.920
Terminal Period									41.811.709
PVTS		**81.127.267**							

Table 27: Present Value of Tax Shields Calculation according to each theoretical model, *Own Calculations*

Appendix 17: Bankruptcy Probability

Rating is	*Default Probability*
D	100%
C	100%
CC	100%
CCC	48,2680%
B-	26,4400%
B	19,9430%
B+	15,2350%
BB	7,4800%
BB+	4,6200%
BBB	1,3200%
A-	0,5940%
A	0,3796%
A+	0,2080%
AA	0,0518%
AAA	0,0020%

Table 28: Probability of Default*, Probability of Default Ratings and Loss Given Default Assessments for Non-Financial Speculative-Grade Corporate Obligors in the United States and Canada, Moody's*

Appendix 18: Peer Group Definition

Name	Market Capitalization		Ebitda Margin 5Y		AVG ROIC 1 Year		Sales 5 Year CAGR				
	In mn zloty	Similar	%	Similar	%	Similar	%	Similar	Yes's	No's	
EUROCASH SA	**6258,6**		**2,893567**		**19,32**		**28,96**				
DELHAIZE GROUP	11949,0	Yes	7,29465	No	8,04	No	4,22	No	1	3	
METRO AG	28887,0	No	4,943283	Yes	8,23	No	0,83	No	1	3	
CASINO GUICHARD PERRACHON	32082,4	No	6,9052	No	6,09	No			0	3	
KONINKLIJKE AHOLD NV	44180,2	No	7,15505	No	11,56	No	6,40	No	0	4	Exclude
CARREFOUR SA	54039,8	No	4,9636	Yes	4,43	No			1	2	
TESCO PLC	138273,8	No	7,86205	No	9,41	No			0	3	
SEVEN & I HOLDINGS CO LTD	83260,6	No	8,787517	No	6,14	No	-2,52	No	0	4	Exclude
IZUMI CO LTD	5690,1	Yes	7,765333	No	5,04	No	2,54	No	1	3	
HOME RETAIL GROUP	5381,0	Yes	7,207517	No	5,17	No			1	2	
DIXY GROUP	4587,8	Yes	5,285183	Yes	4,58	No	50,66	No	2	2	Accept
DON QUIJOTE CO LTD	9436,5	Yes	6,364183	No	6,90	No	11,31	No	1	3	
MASSMART HOLDINGS LTD	14680,2	No	5,956983	No	27,70	No			0	3	
CLAS OHLSON AB-B SHS	2603,6	No	12,93585	No	22,03	Yes	7,31	No	1	3	
RUENTEX INDUSTRIES LTD	6455,8	Yes	16,26837	No	6,81	No			1	2	
SHINSEGAE CO LTD	6201,4	Yes	13,29935	No	2,26	No			1	2	
UNY CO LTD	5600,8	Yes	6,894717	No	3,36	No	-3,91	No	1	3	
CONTROLADORA COML MEXIC-UBC	10937,2	Yes	7,9035	No	6,00	No	-1,43	No	1	3	
NORTH WEST CO INC/THE	3662,7	Yes	9,185183	No	14,50	Yes	9,05	No	2	2	
VALOR CO LTD	2710,0	No	5,889267	No	5,30	No	6,06	No	0	4	Exclude
FUJI CO LTD	2416,9	No	2,84635	Yes	1,96	No	-2,76	No	1	3	
AEON CO LTD	29340,6	No	6,621267	No	6,14	No	1,45	No	0	4	Exclude
WESFARMERS LTD	140173,3	No	8,6977	No	7,32	No			0	3	
WAL-MART STORES INC	764914,7	No	7,580133	No	14,50	Yes	4,43	No	1	3	
AXFOOD AB	6020,4	Yes	5,23645	Yes	24,98	Yes	4,71	No	3	1	Accept
MIGROS TICARET A.S	6969,1	Yes	6,766917	No	3,04	No	8,92	No	1	3	
PRICESMART INC	7296,0	Yes	5,878867	No	15,00	Yes	17,76	Yes	3	1	Accept
SONAE	5423,5	Yes	10,94012	No	4,88	No	3,32	No	1	3	
BOOKER GROUP PLC	8774,4	Yes	2,254883	Yes	21,43	Yes			3	0	Accept
RALLYE SA	4723,8	Yes	6,7707	No	5,00	No			1	2	
O'KEY GROUP SA-GDR REGS	9167,1	Yes	6,23624	No	15,99	Yes			2	1	Accept
GLAXOSMITHKLINE CONSUMER HEA	9223,0	Yes	19,29888	No	29,44	No	18,72	Yes	2	2	
KESKO OYJ-B SHS	9997,4	Yes	4,149217	Yes	6,25	No	0,96	No	2	2	
CARREFOURSA CARREFOUR SABA-A	3349,1	Yes	4,225933	Yes	4,17	No	40,03	Yes	3	1	Accept
DISTRIBUIDORA INTERNACIONAL	12878,7	No	4,762675	Yes	8,77	No			1	2	
X 5 RETAIL GROUP NV-REGS GDR	14726,0	No	8,349117	No	8,43	No	26,25	Yes	1	3	
DECHRA PHARMACEUTICALS PLC	2689,6	No	8,806317	No	12,93	No			0	3	
GREGGS PLC	2417,8	No	11,86367	No	22,90	Yes			1	2	
BIM BIRLESIK MAGAZALAR AS	22049,0	No	5,180167	Yes	49,61	No	26,32	Yes	2	2	Accept
COLRUYT SA	24864,7	No	8,7711	No	21,79	Yes			1	2	
WM MORRISON SUPERMARKETS	32228,1	No	6,90005	No	9,76	No			0	3	
SAINSBURY (J) PLC	32961,4	No	5,673783	Yes	7,19	No			1	2	
JERONIMO MARTINS	38144,5	No	6,973333	No	17,36	Yes	15,94	Yes	2	2	Accept
CENCOSUD SA	39991,7	No	8,301217	No	8,12	No	21,84	Yes	1	3	
MAGNIT	44300,0	No	7,208367	No	14,05	Yes			1	2	Accept
PICK N PAY STORES LTD	7391,5	Yes	4,389283	Yes	37,74	No			2	1	
SUN ART RETAIL GROUP LTD	47826,7	No	5,618725	Yes	14,13	Yes			2	1	
SHANGHAI FRIENDSHIP GROUP-B	6630,8	Yes	4,818083	Yes	8,93	No	16,07	Yes	3	1	Exclude
SUMBER ALFARIA TRIJAYA TBK P	6579,2	Yes	4,34555	Yes	17,16	Yes			3	0	Accept
HARRIS TEETER SUPERMARKETS I	6044,6	Yes	7,128567	No	9,67	No	3,95	No	1	3	
PUREGOLD PRICE CLUB INC	7280,2	Yes	6,8556	No		No			1	2	

Table 29: Peer Group Definition, *Bloomberg and Own Calculations*

Appendix 19 : Eurocash Income Statement (million zloty)

Eurocash	2007	2008	2009	2010	2011	2012e	2013e	2014e	2015e	2016e	2017e	2018e
Sales	**4.726**	**6.130**	**6.698**	**7.792**	**9.981**	**16.553**	**17.949**	**19.134**	**20.301**	**21.288**	**22.191**	**23.061**
Sales of goods	4.638	5.980	6.528	7.534	9.645							
Sales of services	88	150	170	258	336							
Costs of sales	**(4.324)**	**(5.589)**	**(6.074)**	**(6.990)**	**(8.992)**	**(14.928)**	**(16.187)**	**(17.255)**	**(18.308)**	**(19.198)**	**(20.013)**	**(20.797)**
Costs of goods sold	(4.306)	(5.563)	(6.055)	(6.988)	(8.989)							
Costs of services sold	(18)	(26)	(19)	(3)	(3)							
Gross profit	**402**	**541**	**624**	**801**	**988**	**1.625**	**1.762**	**1.878**	**1.993**	**2.090**	**2.178**	**2.264**
Materials and Energy	(19)	(32)	(37)	(52)	(67)							
External Services	(109)	(143)	(180)	(218)	(275)	(537)	(585)	(656)	(696)	(730)	(761)	(791)
Taxes and Charges	(5)	(8)	(10)	(17)	(25)							
Other Costs	(19)	(29)	(18)	(27)	(26)							
Payroll	(101)	(134)	(148)	(201)	(270)	(465)	(517)	(565)	(614)	(660)	(705)	(751)
Social Security and Other benefits	(20)	(26)	(29)	(41)	(52)							
Profit on sales	**128**	**169**	**202**	**245**	**273**	**622**	**660**	**658**	**683**	**700**	**712**	**722**
Other operating income	12	15	25	26	55	129	64	68	72	75	79	82
Other operating expenses	(18)	(26)	(33)	(41)	(63)	(81)	(88)	(94)	(99)	(104)	(108)	(113)
EBITDA	**122**	**158**	**195**	**231**	**266**	**670**	**636**	**632**	**655**	**671**	**682**	**691**
Provisions	0	0	0	0	0	13	(14)	(12)	(12)	(11)	(10)	(10)
Depreciation	(36)	(43)	(49)	(60)	(73)	(111)	(126)	(96)	(74)	(83)	(98)	(107)
EBIT	**87**	**116**	**145**	**170**	**193**	**572**	**496**	**523**	**569**	**577**	**574**	**573**
Financial income	2	3	6	6	5	6	6	5	6	6	6	6
Financial costs	(13)	(22)	(21)	(31)	(45)	(81)	(42)	(28)	(20)	(21)	(24)	(26)
Share of losses of equity accounted investees	0	(2)	(1)	(1)	(2)	0	0	0	0	0	0	0
Profit before income tax	**75**	**95**	**129**	**145**	**151**	**497**	**459**	**500**	**555**	**561**	**555**	**552**
Income tax expense	(16)	(16)	(26)	(17)	(17)	(94)	(87)	(95)	(105)	(107)	(105)	(105)
Profit from discontinued operation (net of income tax)	0	0	0	0	0	0	0	0	0	0	0	0
Profit for the period	**59**	**78**	**103**	**128**	**134**	**402**	**372**	**405**	**449**	**455**	**450**	**447**

Table 30: Eurocash Income Statement, *Eurocash Annual Reports and Own Calculations*

Appendix 20: Eurocash Balance Sheet (million zloty)

Eurocash	2007	2008	2009	2010	2011	2012e	2013e	2014e	2015e	2016e	2017e	2018e
Goodwill	34	92	122	355	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004
Intangible assets	122	126	140	193	445	416	388	382	386	391	396	402
Property, plant and equipment	121	172	188	234	409	398	421	454	503	555	554	554
Investment property	0	0	0	0	2	2	2	2	2	2	2	2
Investments in equity accounted investees	0	2	1	0	20	20	20	20	20	20	20	20
Other long-term investments	0	0	0	6	4	4	4	4	4	4	4	4
Long-term receivables	2	6	2	2	3	5	5	6	6	6	6	7
Deferred tax assets	0	4	6	18	38	25	12	6	6	6	6	6
Other Long Term Prepayments	0	2	0	3	3	4	4	4	4	5	5	5
Non-current assets (long-term)	**278**	**403**	**459**	**811**	**1.929**	**1.877**	**1.860**	**1.881**	**1.934**	**1.991**	**1.996**	**2.003**
Inventories	225	312	366	635	953	1.039	1.122	1.192	1.259	1.315	1.365	1.412
Trade receivables	240	346	375	669	1.319	1.566	1.670	1.750	1.825	1.881	1.928	1.969
Current tax assets	0	0	0	4	2	0	0	0	0	0	0	0
Other short-term receivables	13	32	30	58	106	**Included in Trade Receivables**						
Other short-term financial assets	0	0	0	3	4	4	4	4	4	4	4	4
Short-term prepayments	2	6	5	12	19	21	23	24	26	27	28	29
Cash and cash equivalents	131	144	157	211	298	138	55	88	219	319	462	606
Current assets (short-term)	**612**	**841**	**933**	**1.592**	**2.701**	**2.768**	**2.874**	**3.057**	**3.332**	**3.545**	**3.786**	**4.020**
Total assets	**890**	**1.244**	**1.392**	**2.403**	**4.630**	**4.644**	**4.734**	**4.938**	**5.267**	**5.537**	**5.783**	**6.023**
Share capital	128	131	135	136	137	137	137	137	137	137	137	137
Treasury shares	0	0	(1)	(1)	0	0	0	0	0	0	0	0
Reserve capital	47	77	118	175	263	416	718	904	1.106	1.219	1.332	1.445
Treasury shares reserve	0	0	13	13	0	0	0	0	0	0	0	0
Hedging reserve	0	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Retained earnings	59	80	107	139	153	402	372	405	449	455	450	447
Accumulated profit from previous years	(0)	1	5	10	19	0	0	0	0	0	0	0
Profit for the period	59	78	103	128	134	402	372	405	449	455	450	447
Non-controlling interests	0	1	0	0	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Equity attributable to Owners of the Company	**233**	**283**	**367**	**457**	**548**	**951**	**1.222**	**1.441**	**1.688**	**1.806**	**1.915**	**2.025**
Equity	**233**	**283**	**367**	**457**	**548**	**951**	**1.222**	**1.441**	**1.688**	**1.806**	**1.915**	**2.025**
Long-term loans and borrowings	0	0	0	257	666	294	102	0	0	0	0	0
Long-term financial liabilities	112	23	22	23	21	22	22	22	22	22	22	22
Other long-term liabilities	0	0	0	0	0	0	0	0	0	0	0	0
Deferred tax liabilities	5	7	9	8	37	22	19	16	14	11	8	6
Employee benefits	0	0	1	1	2	2	2	2	2	2	2	2
Provisions	0	17	17	17	7	7	7	7	7	7	7	7
Non-current liabilities	**17**	**48**	**50**	**307**	**732**	**347**	**153**	**48**	**45**	**42**	**40**	**37**
Short-Term Loans and borrowings	73	68	0	87	831	652	453	367	280	294	306	318
Short-term financial liabilities	23	33	37	39	40	37	38	39	39	38	38	39
Trade payables	505	755	866	1.409	2.188	2.504	2.701	2.865	3.024	3.155	3.272	3.382
Current tax liabilities	3	6	11	2	15	0	0	0	0	0	0	0
Other short-term payables	16	18	20	45	110	**Included in Trade Payables**						
Current employee benefits	11	14	22	16	50	43	48	53	57	62	66	70
Provisions	8	17	19	41	114	109	118	126	133	140	146	152
Current liabilities	**640**	**912**	**976**	**1.639**	**3.349**	**3.346**	**3.359**	**3.449**	**3.534**	**3.688**	**3.828**	**3.961**
Liabilities	**656**	**961**	**1.025**	**1.946**	**4.081**	**3.693**	**3.511**	**3.496**	**3.578**	**3.731**	**3.868**	**3.998**
Total equity and liabilities	**890**	**1.244**	**1.392**	**2.403**	**4.630**	**4.644**	**4.734**	**4.938**	**5.267**	**5.537**	**5.783**	**6.023**

Table 31: Eurocash Balance Sheet, *Eurocash Annual Reports and Own Calculations*

Appendix 21: Cash Flow Statement (million zloty)

Eurocash	2012e	2013e	2014e	2015e	2016e	2017e	2018e
Sales	**16.553**	**17.949**	**19.134**	**20.301**	**21.288**	**22.191**	**23.061**
Cost of Goods Sold	**(14.928)**	**(16.187)**	**(17.255)**	**(18.308)**	**(19.198)**	**(20.013)**	**(20.797)**
Gross profit	**1.625**	**1.762**	**1.878**	**1.993**	**2.090**	**2.178**	**2.264**
Materials and Energy External Services Taxes and Charges Payroll	(537)	(585)	(656)	(696)	(730)	(761)	(791)
Social Security and Other benefits Other Costs	(465)	(517)	(565)	(614)	(660)	(705)	(751)
Profit on sales	**622**	**660**	**658**	**683**	**700**	**712**	**722**
Other operating income	129	64	68	72	75	79	82
Other operating expenses	(81)	(88)	(94)	(99)	(104)	(108)	(113)
EBITDA	**670**	**636**	**632**	**655**	**671**	**682**	**691**
Depreciation	(111)	(126)	(96)	(74)	(83)	(98)	(107)
Provisions	13	(14)	(12)	(12)	(11)	(10)	(10)
EBIT	**572**	**496**	**523**	**569**	**577**	**574**	**573**
- Operating Cash Taxes	(109)	(94)	(99)	(108)	(110)	(109)	(109)
- Investment in Net Working Capital	(40)	8	12	14	17	19	20
- Capital Expenditures	(70)	(122)	(123)	(126)	(140)	(103)	(113)
+ D & A | Provisions	98	140	109	86	94	109	118
Free Cash Flow to the Firm	**452**	**428**	**422**	**435**	**438**	**489**	**488**
Debt Repayments	(600)	(411)	(205)	(102)	0	0	0
Net Other Financial Liabilites	(1)	1	0	(0)	0	0	(0)
Proceeds from Loans	50	19	16	16	14	12	12
Tax Adjustments	13	18	8	0	0	1	1
Dividends	**0**	(101)	(186)	(203)	(337)	(341)	(337)
Interest Expenses	(81)	(42)	(28)	(20)	(21)	(24)	(26)
Financial Income	6	6	5	6	6	6	6
Free Cash Flow to Equity	**(161)**	**(82)**	**32**	**132**	**100**	**143**	**144**
Cash Beginning of the period	298	138	55	88	219	319	462
Cash End of the Period	138	55	88	219	319	462	606

Table 32: Eurocash Cash Flow Statement Projection, *Own Calculations*

Appendix 22: Research Note

Católica Lisbon Equity Research Project

Eurocash SA

Poland	
FMCG Wholesaler	
Price Target	**47,65 zl**
Recommendation	Hold
Price	**46,45 zl**

Building a Sustainable Cash Cow

- Eurocash **price target of PLN 47,65 and Hold recommendation** reflects my opinion that **the company will not be able to continue acquiring large competitors** due to Polish anti-monopolistic laws
- Instead, management will shift its focus towards **strong organic growth, delivering high levels of cash generation**. Thus, I do believe that Eurocash is a **good and safe investment** for investors seeking steady, growing income streams through dividends.
- Eurocash **top of class management** has, over the past years, successfully **acquired scale through strategic acquisitions**, and is currently pursuing a strongly **focused strategy in organic growth**. Even so, the company still manages to generate **high levels of cash**. (app. 1x OCF/EBITDA 2011)
- **Price close to Perfection**: The current share price reflects the market expectation in: (a)future strong lfl growth in Eurocash Cash&Carry and Delikatesy Centrum; (b) Improved revenues from a higher penetration rate on Tradis franchisee chain; (c) higher cross-sale among the different areas of Eurocash business and (d) Cost Synergies arising from Tradis Acquisition
- **High Expectations**: The scenarios aforementioned reflect very high expectations for the future, however the track record of Eurocash management makes me confident that the company will achieve the goals to which it is proposing.

Trading Data

Market Capitalization	6,399
52 week High - Low	24,75 - 49,00
1 Year Change	**86,00%**
Shares Outstanding	137,75
Free Float	56%
Avg Daily Volume	218k
Avg Daily Value	8,16m

Market Perfomance

Highlights	2011	2012e	2013e	2014e
Revenues	9980,6	16553,3	17949,5	19133,5
EBIT	193,0	571,9	495,7	523,0
Earnings	134,4	402,4	371,9	405,1
EPS	0,976	2,921	2,700	2,940
DPS	0	0,730	1,350	1,470

Profitability and Valuation Metrics				
EBIT Margin	1,93%	3,45%	2,76%	2,73%
EV/EBITDA	27,21	10,79	11,38	11,45
PE	34,32	15,90	17,20	15,80

Balance Sheet Data

Shareholder's Equity	0,879
P/BV	6,38
Net Cash (Debt)	(0,847)

Forecast Returns

Forecast Price Apr	2,6%
Forecast Div. Yield	2,9%
Forecast Stock Return	5,5%

Investment Case

Eurocash share price has registered **a 86% appreciation over the last year** (+50% vs WIG), and I do believe that the market has already fully incorporated Eurocash's management optimistic expectations for the future, hence, **I do not forecast any major further share appreciations for the future.**

Polish consumers face difficulties for the current year, as a result of a stall in employment increase (0.4%) and a slower wage growth (3.8% vs 5.4% in 2011) which combined with a high consumer price index will result in a slower growth rate on disposable income (1.2% vs 3.9% in 2011). Overall, according to BZWBK Macro team, retail sales are expected to grow by only 4.6%, which compares with an 11.0% growth in 2011.

Food sales are expected to continue growing (app. 3%) as a result of the food consumer price index (3% as well), which means that **sales volume will remain unchanged.**

The macroeconomics trends forecast a poor year for retailers since the slow increase on disposable income will shift Polish consumers towards a higher price sensitivity behavior, favoring discounters' format. Moreover, **only market leaders will be able to take advantage of scale economies,** offering competitive prices and attracting new customers, achieving growth rates above the inflation.

Under this scenario **I believe that Eurocash, as a market leader, has the required characteristics to outperform the market in the medium and long term.**

Eurocash latest acquisition is a proof of Eurocash managers' confidence on the Polish retail market, even under such a macroeconomic turmoil**. This acquisition established Eurocash has the second largest player in the FMCG market,** behind Biedronka, and far distant from other competitors. This takeover **has given the company the required competitive scale and the base of franchise partners to outperform the wholesale market in the medium and long term.** Furthermore, it is foreseeable that Tradis' franchise chains will increase their penetration rates to levels similar to Eurocash's, supporting even further the LfL growth in the forthcoming years.

Management expectations are undoubtedly optimistic, yet, it is important to bear in mind the track record of Eurocash both in M&A, as well as, in strong organic growth. Over the last five

years Eurocash has acquired and successfully integrated Eurocash Dystribucja and Premium Distributors; it has displayed a 29% CAGR on sales; It has maintained on a continuous basis a solid Like for Like growth over inflation; and it has registered a compound annual growth rate of over 21% on EBITDA, with solid increases every year.

Under this valuation framework, I have assumed the partially realization of management expectations for Tradis acquisition's synergies and for the other business units. In particular:

• **Eurocash Cash&Carry -** It was assumed **high organic growth** through further implementation and integration of this business unit successful concept in existing outlets; and **regional expansion** in regions where Eurocash's presence is not as a strong as it could be;

• **Delikatesy Centrum -** This business unit is expected to **expand throughout Poland** to similar density levels in southeastern Poland (approximately 3 stores per 100.000 habitants) until 2017;

• **Eurocash Dystrybucja, Premium Distributors & KDWT-** Future expectation for these business units is completely based on organic **growth supported by cross-selling with other business units -** selling a complete set of FMCG - Food, Tobbaco and Alcohol.

• **Tradis - The company has high hopes for Tradis, however I was slightly more prudent and only included partially the synergies expected.** Namely, a better gross profit margin through better purchasing agreements; logistic synergies arising to PLN 30 m. on 2012 and 2013; disposal of real estate amounting to PLN 100 m. and higher sales revenues as a result of a better integration of Tradis franchisee chains;

Half year results shows the company is on track to fulfill management expectations. Eurocash C&C and Delikatesy Centrum revenues grew by 16% and 17%, respectively. KDWT revenues grew by 6%, Premium Distributors by 2% and Eurocash Dystrybucja by 24%. Overall, Eurocash revenues grew by 71% to PLN 7 948 million.

Is not only about revenues. Profitability is also improving. The gross profit margin improved by over 1%, EBITDA has registered a 0,11 p.p. improvement, whereas EBIT improvement was of 0,21 p.p.. Net Profit margin, on the other hand, has decreased by 0,16 p.p., as a result of one-time extraordinary financial costs. However, I do believe that in the future the company net profit margin will improve.

Eurocash, a new Cash Cow. Polish wholesale FMCG market is still not completely consolidated, yet, the large dimensition of Eurocash prevents it to acquire any competitors with considerable size in the future, due to Polish anti-monopolistic laws. Given this, Eurocash's M&A strategy is no longer viable, and the management has shifted its strategy towards a strong and sustainable organic growth.

Thus, my expectation for the future is that **the company will complete the integration of Tradis, and continue to grow at levels similar to the past like-for-like growth rates** on the different business units. Given that the company is almost completely settled in Poland, and that its competitors do not have the scale to compete effectively, I expect that **the company will keep delivering high levels of cash generation.** (2.5 x OCF/EBITDA 2012 1H), which until 2014 will be used to deleverage the company, but afterwards will be distributed as dividends**.**

The communion of these factors makes me believe that Eurocash shares are a **fairly good investment for someone seeking for a stable long term income stream,** through dividends (my estimates point to a 5% dividend yield on 2015**). However, if an investor is looking for quick capital appreciation this is not a good alternative, since on my opinion the market has almost perfectly incorporated the value of Eurocash**.

Valuation

Eurocash valuation was based on the Adjusted Present Value method complemented with a multiple valuation. The APV valuation was developed following the works of Fernández; Damodaran; and Nyborg & Cooper. According to this latter framework, **Eurocash shares are worth PLN 47,66 per share. This valuation is supported by P/E estimate multiple result of PLN 47,16.**

	Fernández	*Damodaran*	*Extended ME*
Explicit Period Value	**2.468.873.244**	**2.463.608.422**	**2.452.733.217**
Terminal Growth Rate		3,00%	
Terminal FCFF (2019)	503.028.302	503.028.302	503.028.302
Terminal Value	8.701.853.889	8.575.661.404	8.324.720.323
Terminal Discounted Value	**5.251.708.683**	**5.151.332.812**	**4.952.138.938**
Total Vu	**7.720.581.927**	**7.614.941.234**	**7.404.872.155**
Further Adjustements to Vu			
- Debt (2012)		(946.746.569)	
- Financial Liabilities		-59.767.675	
- Provisions		-115.780.082	
- Employees Benefits		-44.927.132	
- Other Long Term Liabilities		-293.305	
+ Excess Cash and Marketable Securities		141.040.363	
Total	**6.694.107.526**	**6.588.466.833**	**6.378.397.754**
+ PVTS	**-33.149.422**	**-3.132.170**	**81.127.267**
+ Expected Bankruptcy Costs	**0**	**-4.111.203**	**-3.980.120**
Equity Value	**6.660.958.104**	**6.577.831.717**	**6.452.261.302**
Value per share	**48,35**	**47,75**	**46,84**
Number of shares		*137.754.336*	
Average Value per Share		**47,65**	

Multiple Valuation

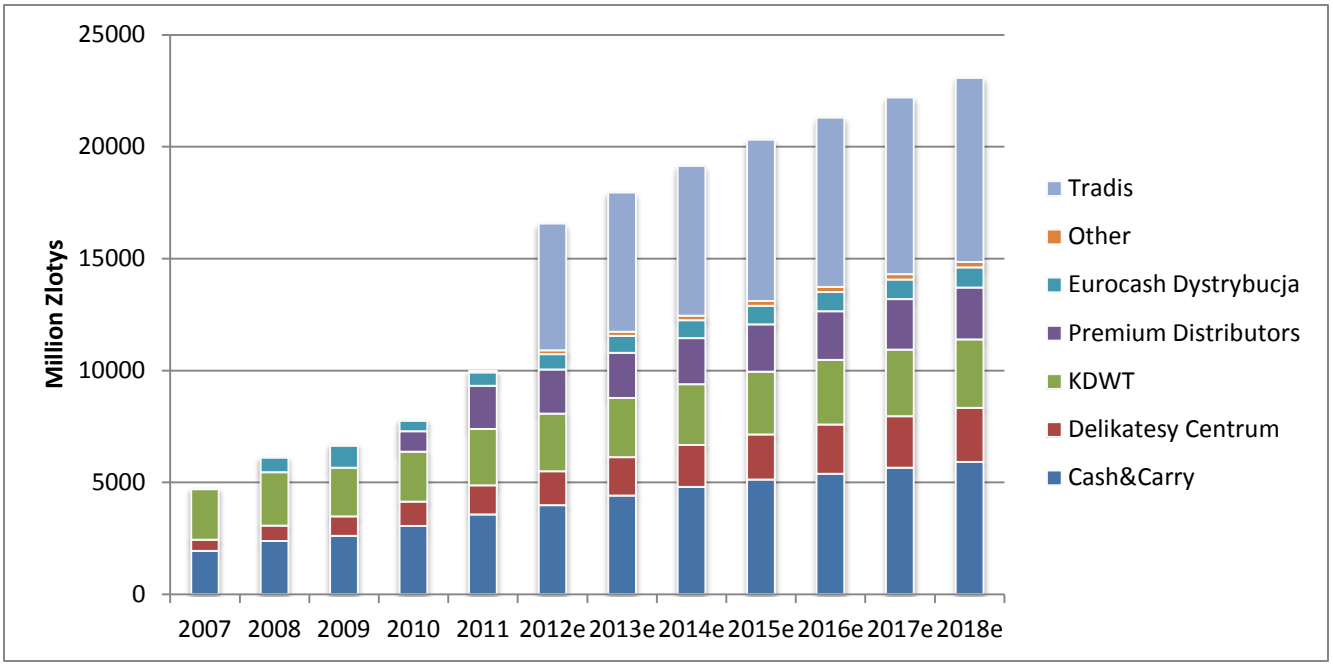
The Relative valuation developed yields a **PLN 43,32 value for Eurocash.** However, the multiple that displays a higher adherence to reality is **Estimated P/E, which points to a PLN 47,16 value per share. These findings are useful to corroborate the value yielded by the Adjusted Present Value methodology.**

	P/E Current	Estimated P/E	P/FCF	EV/T12M EBITDA	EV/EBITDA Nxt Year
Eurocash	*34,321*	*20,111*	*15,881*	*18,13*	*12,697*
AXFOOD AB	14,207	13,372	10,167	N/A	6,836
PRICESMART INC	34,013	22,642	60,599	17,389	12,46
BOOKER GROUP PLC	20,062	19,173	24,659	15,192	12,421
CARREFOUR SABA-A	N/A	44,73	N/A	17,307	7,163
SUMBER ALFARIA	43,422	26,958	N/A	20,005	13,009
MAGNIT	21,955	19,263	N/A	12,502	9
O'KEY GROUP SA	24,58	19,482	N/A	12,222	8,697
DIXY GROUP	54,253	16,574	N/A	9,768	5,709
BIM	38,275	29,165	50,156	25,811	19,451
JERONIMO MARTINS	25,49	19,852	N/A	13,457	10,935

	P/E Current	Estimated P/E	P/FCF	EV/T12M EBITDA	EV/EBITDA Nxt Year
Harmonic Mean	26,263	20,886	22,81	14,795	9,367
Denominator	1,3344	2,258	2,8839	399	564
	Per share	Per share	Per share		
Valuation					
Equity Value (in millions)	4.828	6.496	9.062	5.032	4.418
Price Per Share	35,05	47,16	65,78	36,53	32,07
Average			**43,32**		

Financials

Revenue Estimation



Growth	CAGR	2012	2013	2014	2015	2016	2017	2018
Cash&Carry	12,91%	11,62%	11,00%	8,82%	6,61%	5,29%	5,00%	4,50%
Delikatesy	21,48%	16,49%	13,14%	8,26%	8,48%	8,68%	5,00%	4,73%
KDWT	2,17%	2,17%	2,50%	3,00%	3,00%	3,00%	3,00%	3,00%
Premium	N/A	1,83%	2,00%	2,50%	3,00%	3,00%	3,00%	3,00%
Eurocash	-2,21%	15,00%	10,00%	5,00%	4,00%	3,00%	3,00%	3,00%
Other	15,29%	161,10%	12,50%	10,00%	7,50%	4,00%	3,00%	3,00%
Tradis	N/A	10,00%	10,00%	7,50%	7,50%	5,00%	4,50%	4,00%
Total	16,11%	65,85%	8,43%	6,60%	6,10%	4,86%	4,24%	3,92%

Income Statement Forecast – Refer to Appendix 19

Cash Flow Statement Forecast – Refer to Appendix 21

Balance Sheet Forecast – Refer to Appendix 20

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Glossary of Acronyms

APV – Adjusted Present Value

BZWBK - Bank Zachodni WBK, Polish Bank

CAGR – Compound Annual Growth Rate

CAPEX – CAPital EXpenditures

CAPM – Capital Asset Pricing Model

COGS – Cost Of Goods Sold

CPI – Consumer Price Index

D – Debt Value

D&A – Depreciation and Amortization

D/E – Debt to Equity Ratio

DCF – Discounted Cash Flow

DPO – Days Payable Outstanding

DRO – Days Receivable Outstanding

DSI – Days Sales of Inventories

E – Equity Value

EBIT – Earnings Before Interest and Taxes

EBITA - Earnings before Interests, Taxes and Acquired Intangibles and Amortizations

EBITDA – Earnings Before Interests, Taxes, Depreciation and Amortization

Euribor - European Interbank Offered Rate

EV – Enterprise Value

EV/EBITA – Enterprise Value to EBITA (multiple)

EV/EBITDA – Enterprise Value to EBITDA (multiple)

EVA – Economic Value Added

FCFE – Free Cash Flow to Equity

FCFF – Free Cash Flow to the Firm

FMCG – Fast Moving Consumer Goods

GDP – Gross Domestic Product

IMF – International Monetary Fund

IPO – Initial Public Offer

Kd – Cost of Debt

Ke – Cost of Equity

Ku – Unlevered Cost of Equity

LfL – Like for Like growth

M&A – Mergers & Acquisitions

ME – Refers to the work of Miles & Ezzell

MM – Refers to the work of Modigliani & Miller

NCC – Non Cash Charges

NOPAT – Net Operating Profit After Taxes

NWC – Net Working Capital

p.a. –per annum

P/E –Price to Earnings (multiple)

P/FCF – Price to Free Cash Flow (multiple)

PV – Present Value

PVTS – Present Value of Tax Shields

ROIC – Return on Invested Capital

S&P – Standard & Poor's

T – Tax Rate

VL – Value of the levered company (takes into account the financing scheme)

VTS – Value of Tax Shields

VU –Value of the unlevered company (as if the company was entirely financed by equity)

WACC – Weighted Average Cost of Capital

Wibor – Warsaw Interbank Offered Rate

WIG - Wrasawzki Indeks Giedowy (Warsaw Stock Exchange Index)

WSE – Warsaw Stock Exchange

YTM – Yield To Maturity

βd – Beta of Debt

βL – Leveraged Beta

βU – Unleveraged Beta