



**CATÓLICA
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UPS, I did it again: Panalpina

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Abstract

This thesis intends to study a cross-border transaction in the Transportation & Logistics industry. This industry is being subject to a strong consolidation trend over the last years, as a response to the current sector's challenges and the intense competition level. In this sense and as a major study, I propose that United Parcel Service (UPS), one of the biggest package delivery companies in the world and based in the United States, acquires the Swiss-based company, Panalpina World Transport (Panalpina), a top 5 European Freight Forwarding and Logistics company. I suggest a bid price of F123.84 (\$127.00) per share, reflecting a premium of 18% over the day prior to the valuation. This deal, which is planned to be an all cash transaction, is expected to create net synergies in the amount of \$839Mn, while the expected gain for UPS is \$346Mn. After the acquisition, it is proposed that Panalpina operates as a subsidiary of the major company, UPS.

A tese apresentada pretende estudar uma transação internacional na indústria dos Transportes e Logística. Esta mesma indústria tem sido sujeita a uma forte tendência de consolidação nos últimos anos, como resposta aos desafios correntes do setor e do alto nível concorrencial existente no mesmo. Neste âmbito e como estudo central, proponho que a United Parcel Service (UPS), uma das maiores empresas na área de distribuição de embalagens do mundo com sede nos EUA, adquira uma empresa Suíça, a Panalpina World Transport (Panalpina), sendo esta uma empresa de distribuição e logística presente no top 5 Europeu. Como preço de oferta sugiro F123.84 (\$127.00) por ação, representando um prémio de 18% sobre o valor de mercado do dia anterior à avaliação. Com este negócio, o qual se planeia que seja realizado completamente em dinheiro, espera-se criar um valor líquido de sinergias de \$839 milhões, sendo que o ganho para UPS é estimado em \$346 milhões. Após a transação, é proposto que a Panalpina opere como uma subsidiária da empresa principal, a UPS.

Acknowledgements

“The Expert in Anything Was Once a Beginner”

(Helen Hayes)

I dare not say I am an expert in M&A. Far from the expertize level, only gained with years and years of working in the industry, I am only a motivated, deeply curious student interested in analyzing the business and financial world we live in.

To my academic journey, coming now to an end with this dissertation, I must express my sincere acknowledgment to my family, who always supported and incentivized me during all these years, but especially during the Masters. In particular, I would like to thank my parents, Ana and Nuno, as well as my brothers, Bernardo and Tomás.

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List of Abbreviations

| | |
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| APT | Arbitrage Pricing Theory |
| AR | Annual Report |
| Avg | average |
| B2B | Business-to-business |
| B2C | Business-to-consumer |
| BATNA | Best Alternative to a negotiated agreement |
| Bn | Billion |
| CAGR | Cumulative Annual Growth Rate |
| Capex | Capital Expenditures |
| CAPM | Capital Asset Pricing Model |
| CEP | Courier, Express and Parcel |
| CFD | Costs of Financial Distress |
| CHF or ₣ | Swiss Franc |
| DCF | Discounted Cash-Flow |
| DD | Due Diligence |
| DDM | Dividend Discount Model |
| DHL | Deutsche Post DHL |
| DJTI | Dow Jones Transportation Index |
| DPS | Dividends per Share |
| EBIT | Earnings before Interest and Taxes |
| EBITDA | Earnings before Interest, Taxes, Depreciation and Amortization |
| ECF | Equity Cash Flow |
| EMEA | Europe, Middle East and Asia |
| EPS | Earnings Per Share |
| EU | European Union |
| EV | Enterprise Value |
| EVA | Economic Value Added |
| FCFF | Free Cash-Flow to the Firm |
| FD | Financial Distress |
| FedEx | Federal Express |
| FF&L | Forwarding Freight and Logistics |
| G | Growth Rate |
| GDP | Gross Domestic Product |
| Gov | Government |
| IMF | International Monetary Fund |
| IT | Information Tcehnology |
| Kd | Cost of Debt |
| Ke | Cost of Equity |

| | |
|-----------------------|----------------------------------|
| Ku | Unlevered Cost of Equity |
| LBO | Levered Buyout |
| LTL | Less than truckload |
| Market Cap | Market Capitalization |
| Mn | Million |
| MRP | Market Risk Premium |
| MV | Market Value |
| NWC | Net Working Capital |
| OTP | Operations Transformation Plan |
| p.p. | Percentage Points |
| Panalpina | Panalpina World Transport |
| PE | Private Equity |
| PPE | Property, Plant and Equipment |
| PV | Present Value |
| R&D | Research & Development |
| Reuters | Thomson Reuters |
| Rf | Risk-Free |
| ROE | Return on Equity |
| SC&F | Supply Chain & Freight |
| T&L | Transportation and Logistics |
| TEU | Twenty-Foot-Equivalent |
| TNT | TNT Express |
| tv | Terminal Value |
| U.K. | United Kingdom |
| U.S. or United States | United States of America |
| UPS | United Parcel Services |
| USD or \$ | United States Dollar |
| WACC | Weighted Average Cost of Capital |
| WC | Working Capital |
| yr | year(s) |
| YTM | Yield to maturity |

1. Introduction

Cross-border M&A is gaining momentum as the world becomes increasingly integrated and globally active. Under this scenario, it was proposed an acquisition between UPS, U.S. based, and Panalpina, a Swiss-based company, both players in the Transportation & Logistics industry. The purpose of this dissertation is to study this cross-border acquisition, describing both the strategic and financial details of such transaction.

The T&L industry is deeply related to the development and growth of the world economy. In the last two years, the industry has been changing, presenting a clear consolidation trend, motivated by companies seeking larger market shares. And the change is yet not expected to settle with crowdsourcing, e-commerce and data aggregators posing great challenges to the industry, leading to potential innovative partnerships.

The two studied companies are both top players in their core sectors: UPS is a leader in CEP while Panalpina is one of the top players in the FF&L segment in Europe. With transcontinental and cross-borders transportation occurring more and more and the traditional postal services decaying, it seems natural for these two companies to join competencies, taking advantage of their best skills.

The remainder of this dissertation is organized as follows: 2) literature review; 3) industry review; 4) companies' analysis; 5) deal rationale; 6) valuation of the individual and resulting entity; 7) the transaction; and 8) conclusion.

2. Literature review

2.1. Valuation Techniques

Valuation has become the financial analytical skill that managers want to learn and excel (Luehrman, 1997). When valuing a company there are several methods that can be used. In the purpose of this dissertation, I will discuss the DCF approach, namely the WACC-method and APV, as well as the relative valuation method, specifically market and transaction multiples. Other methods that will not be presented here include the ECF, DDM, Dynamic ROE, EVA and Option Theory, which comprises real option and Black-Scholes theory.

2.1.1. Cash-Flow Approach

The methodologies used in this method include forecasting future cash-flows and discounting them to their present value (PV) at a rate that reflects their riskiness (Luehrman, 1997). According to academic literature, cash-flows are estimated for a limited period of time known as the explicit period, after which they are modelled to grow at a constant rate, leading to a terminal value. Hence, the value of the firm can be seen as the sum of two separate parts, as shown in the following equation:

$$\text{Firm Value} = \text{PV of Cash-Flow during explicit period} + \text{Terminal Value} \quad 2.1.$$

The Free Cash-Flow to the Firm (FCFF), which is the cash-flow available for all investors such as equity holders, debt holders, and any other non-equity investors, is computed through the following formula:

$$\text{FCFF} = \text{EBIT} * (1 - t) + \text{Depreciation} + \text{other non-cash expense} - \Delta \text{Net Working Capital} - \text{CAPEX} \quad 2.2.$$

The terminal value is computed by making simplified assumptions about the company's performance after the explicit period. Specifically, it assumes that the last estimated FCFF will grow at constant rate, g , in perpetuity, implying a perpetual expected life of the company.

$$\text{Terminal Value} = \frac{\text{FCFF}_t * (1 + g)}{(r - g)} \quad 2.3.$$

This simplification of the valuation through the terminal value, may not be so straightforward as one considers its relative weight to the total firm value. According to Young, et al. (1999), the

terminal value accounts for, on average, 90% of the total value assuming a five-year period of annual estimates and 79% considering a ten-year period. Hence, it is extremely important to carefully determine the growth rate used in the terminal value.

While the methodology used to compute the FCFF is equal between the WACC and APV, the key distinct factors lie on the discount rate and the way they account for the value creation or destruction by financial tricks (Luehrman, 1997).

2.1.1.1. The WACC-method

The WACC-method emerged as best practice in the 1970s, however it is regarded as obsolete in the current days (Luehrman, 1997). The discount rate used, commonly referred as the cost of capital, is a weighted average of two specific components: the cost of debt (K_d); and the required return of equity (K_e). That said, the WACC is neither a cost nor a required return but a weighted average of both (Fernandez, 2004).

There are three critical components of the WACC as seen in equation 2.4: the required return of equity, the after-tax cost of debt, and the target mix between the market values of Debt and Equity.

$$WACC = K_e * \frac{E}{(E + D)} + K_d * (1 - t) * \frac{D}{(E + D)} \quad 2.4.$$

The first term, the required return of equity is built on the risk-free rate, the market risk premium and the company's specific risk known as the levered beta, β_e (eq. 2.5.). There are several ways to estimate this cost of equity such as the CAPM, the Fama-French three factor model or the APT. According to Bruner, et al. (1998), the CAPM is the dominant model, hence, this will be the one discussed in detail. It is computed as shown in equation 2.5. and its main components are described in table 1.

$$K_e = r_f + \beta_e * (r_{mkt} - r_f) \quad 2.5.$$

| <i>Component</i> | <i>Description</i> | <i>Considerations</i> |
|--|--|--|
| <i>Risk-Free</i> (r_f) | Expected return of an investment with zero default risk | The choice should include government default-free bonds, denominated in the same currency as the cash-flows (Koller, 2005) |
| <i>Levered Beta</i> (β_e) | Measure of the systematic risk of a stock relative to the market | Empirically estimated by running a regression of the individual stock return on the market returns |
| <i>Market Risk Premium</i> ($r_{mkt} - r_f$) | Excess return required by investors to hold a risky asset | According to Damodaran (2009), the historical premium approach remains the standard and seems to be a good predictor of future market risk premium. It compares the actual returns on stocks to the actual returns earned on a default-free asset, for a long period of time |

Table 1: Components used to compute the cost of equity

The second term, the after-tax cost of debt, allows the WACC to incorporate the value of the interest tax shields that arise from a company's debt (Luehrman, 1997). To estimate this cost of debt for investment grade companies, it is fairly accepted to use the YTM to the company's long term bonds, or its attributed rating and default spread. When the firm is not rated nor has outstanding bonds, it should be estimated a synthetic rating, with the purpose to achieve a default spread, and consequently, a cost of debt. As a last resource, if the company has recently obtained a long-term obligation, one can use the required interest rate.

The third key component, the target proportion of Debt and Equity to the Enterprise Value on a market basis, reflects two distinct characteristics. Firstly, it is important to recall that the WACC represents the expected return investors could earn on an alternative investment entailing the same risk (Luehrman, 1997). Hence, it seems reasonable that market values of Debt and Equity are used to provide an accurate opportunity cost for the investor. Secondly, the cost of capital should be based on target weights, as opposed to current, since the company's current capital structure may not reflect the expected level over its life.

Having explained the concepts behind the WACC, it is also important to explain its weaknesses. Although it is a tax-adjusted discount rate, it is only suitable for the simplest and most stable capital structures (Luehrman, 1997). In fact, it assumes that a company will have a constant ratio

of Debt-to-EV over its life (Kaplan & Ruback, 1996). Due to this assumption, this method tends to misestimate the value of a company.

2.1.1.2. The APV Method

The APV approach separates the firm value into two components: the value of operations as if the company is all equity financed, and the value added by a firm's choice of capital structure, that is the value that comes from its financing program.

$$APV = EV \text{ as if all equity financed} + PV \text{ of Financing Side effects} \quad 2.6.$$

This method follows from the teachings of world known economists Modigliani and Miller who, put simply, proposed that in a perfect capital market a company's choice about its capital structure does not impact the value of a company. Considering transaction costs, taxes, distress costs, among others, Stewart Myers developed a model in 1974 that discounts different cash-flow types with different discount rates. In addition, this method relies on the principle of value additivity, meaning that it is possible to divide a project into pieces, evaluate each segment independently, and subsequently add them together (Luehrman, 1997).

In order to value the business as all equity financed, the FCFE should be discounted at the unlevered cost of equity, K_u , which would have been the cost of equity if the company had no debt. According to academic literature, the unlevered discount rate is computed as follows:

$$K_u = r_f + \beta_u * (r_{mkt} - r_f) \quad 2.7.$$

Where β_u corresponds to the unlevered beta of the company, meaning the asset beta, which measures the operational assets' systematic risk. This beta can be computed from the average asset beta for comparable companies or through the following formula:

$$\beta_u = \beta_e / \left[1 + (1 - t) * \left(\frac{D}{E + D} \right) \right] \quad 2.8.$$

The second term of equation 2.6. allows the analyst to explore the value created from the financing effects. This can include interest tax shields, costs of financial distress (CFD),

subsidies, hedges, and issue costs. Out of these components, I will only focus on the first two, since, for the considered companies, they are the most relevant ones.

Even though there is some academic discussion regarding which discount rate to use when valuing the tax shields, I will use the cost of debt based on Luehrman (1997) discussed premise: “tax shields are about as uncertain as principal and interest payments”. Hence, the interest tax payments ($D * K_d * t$) are discounted by the cost of debt, during the explicit period. For the terminal value of tax shields, I assume that the company debt will grow at the same rate of the company.

The CFD, defined as firms that have difficulty in making their interest payments, differ from the actual bankruptcy costs, and tend to occur in an earlier stage. With this, financial distress (FD) is far more common in the real world than most people assume (Damodaran, 2006), implying real damage to the company’s operations regarding customers, suppliers, employees, and lenders. In fact, revenues may decrease, suppliers may demand higher prices or faster payments, employees may leave, and lenders may not finance any longer or demand higher interest rates.

In order to account for CFD Damodaran (2006) suggests that one should estimate the default probability of a company as well as its expected CFD, which should then be applied to the unlevered free cash-flow. Bearing in mind the academic discussion, uncertainty and difficulty to estimate these parameters, I will use Reuters’ default probability and the empirical evidence from Korteweg (2007), who estimated a 7.5% CFD for the transportation industry. To compute the its present value, CFD will be discounted by the risk-free rate, following the procedure proposed by Hennessy & Whited (2005), which implies risk neutrality. Hence, the formula used will be:

$$Expected\ CFD = \sum_{t=1}^T \left[\frac{(default\ prob_t * CFD * Unlevered\ FCFF_t)}{(1 + r_f)^t} \right] \quad 2.9.$$

In any method, WACC or APV, valuation is always a function of three fundamental factors: cash, timing and risk (Luehrman, 1997). Hence, it is important to recall that the reliability of the DCF valuation depends on the accuracy of these cash-flow projections, as well as on the realism of the assumptions used in calculating the cost of capital (Kaplan & Ruback, 1996).

2.1.2. Relative Valuation

The multiples approach, either trading or transaction, can assist to triangulate the results of the DCF method. In fact, it can help a company to stress-test its cash-flows forecasts, to understand disparities between its own performance and that of its competitors, and to assess its strategic positioning relative to its competitors (Koller, et al., 2005).

In order to perform a correct valuation based on trading multiples, the following conditions should be verified:

- The industry peer group must compete in the same markets, be subject to the same macroeconomic conditions, and both have similar growth rates and ROIC;
- The multiples must be based on forward looking values, in order to account for the basic principles of valuation, since these predict more accurately (Liu, et al., 2002);
- Use multiples that are not affected by the capital structure (EV-multiples) and are less susceptible to manipulation (Koller, et al., 2005).

Transaction multiples include the consideration of similar companies that were recently acquired. This feature usually comprises the value of the company and the premium paid by the acquirer. Hence, this method can bear greater challenges than solutions. According to Eccles, et al. (1999), there is “no single, correct price” for an acquisition, since it deeply depends on the potential synergies and the necessary control premium that are individually computed and reliant on each acquirer. That said, transaction multiples should be used with caution.

2.2. M&A

M&A transactions can be typically categorized as horizontal (target is a competitor), vertical (target has a buyer-seller relationship), or conglomerate (target does not show the previous relations and operates in different business segments). The first two categories can be considered “focusing acquisitions” while the latter deals with diversification (Bruner, 2004).

2.2.1. Deal rationale

There are five major strategic rationales used in an acquisition intended to create value (Bower, 2001): consolidate to remove excess capacity; roll-up geographically fragmented competitors; expand into new products and/or markets; acquire to substitute R&D costs; and exploit opportunities in a new emerging industry. Goedhart, et al., (2010) mention one more motivation

principle that relies on the improvement of the target company's performance, typically pursued by Private Equity firms.

2.2.2. Valuing synergies

According to Damodaran (2005) there are two major types of synergies: operating and financial. Operating synergies, which tend to be reflected as higher expected cash-flows, come from improvements in the operations of the combined firm and can derive from economies of scale (cost savings), higher growth potential (revenues enhancement), increased pricing power (revenues enhancement), and combination of different strengths (cost savings and/or revenue enhancement). Financial synergies can be associated with higher cash-flows and/or lower cost of capital and deals with: better use for excess cash, which translates into higher cash-flows from an increased capacity to take on more projects; higher debt capacity, which will impact the cost of capital; diversification, leading to uncorrelated cash-flows that can translate to higher debt capacity; and tax benefits, where there can be tax deductions and/or different tax rates.

In order to value synergies, Damodaran (2005) proposes to: 1) evaluate each firm independently (V_1, V_2); 2) estimate the value of the combined firm, with zero synergies ($V_1 + V_2$); 3) estimate the synergy through changes in cash-flows and/or growth rates (V_{1+2}). In order to complete this last step, it is important to account for the financial costs and timing of implementing such synergies, known as the synergy matching principle (Sirower & Sahni, 2006).

After the estimated synergies, it is also important to share and attribute them between the companies (Damodaran, 2005). By separating the synergies, the bidder protects itself by paying only the synergies dependent on the target.

Empirical evidence shows that while companies tend to estimate their realized cost savings accurately, they do not predict the revenue enhancement so well Christofferson, et al. (2004). Moreover, firms tend to underestimate how long it will take to realize both gains in costs and revenues (Eccles, et al., 1999).

2.2.3. Deal payment

Transactions can be paid using cash, securities, or a combination of both. Considering no capital constraints, the difference relies on the level of risk and reward that the acquirer wants to share with the target. In an all-cash transaction, the acquiring shareholders bear all the risks and

potential rewards, whereas in a stock transaction, the synergy's risk is split between both companies (Rappaport & Sirower, 1998). The exact amount of shared risk depends whether it is a fixed share or a fixed value deal. In the former, despite having a certain number of shares to be issued, the value of the deal may fluctuate between the announcement and the closing date, conditional on the acquirer's stock fluctuation. In the latter, the value per share is defined but the proportional ownership of the resulting company is left in doubt until its closing.

When considering whether to pay in cash or stock, a company should analyze whether its own shares are under or overvalued, the probability of not realizing the expected synergies, and the likelihood of change of the target's stock price (Rappaport & Sirower, 1998).

The way a company finances the deal sends a signal to the market regarding the acquirer's confidence on its own acquisition and about its own stock price. In fact, academic studies show that cash deals tend to outperform stock deals (Sirower & Sahni, 2006) and that firms tend to pay with stock when they believe their shares are overvalued (Shleifer & Vishny, 2003)

2.2.4. Cross-Border Valuation

As the world's economies become increasingly integrated, cross-border acquisitions are expected to become even more important in the future. In fact, the volume of such acquisitions has been growing, from 23% of total merger volume, in 1998, to 45% in 2007 (Erel, et al., 2012).

According to Zenner, et al. (2008) there are both long and short-term factors that drive cross-border M&A. The long-term incentives include globalization (the growing integration of markets for labor, capital, goods and services), geography diversification, and deregulation, while the short-term drivers comprise, among others, high relative equity valuations, since companies tend to be more acquisitive when their stock prices are high, and a strong U.S. dollar, considering a transaction where the acquirer is an U.S. firm. On the other hand, the same author also proposes factors that can thwart these transactions, such as protectionist policies, tax complexities, cultural factors and equity flowback.

When valuing cross-border investments, there are specific technicalities such as: which currency to use in the analysis; whether to discount cash-flows when they occur or at the time they are sent to the parent company; whether to use foreign or domestic taxes; and the computation of the

cost of capital. Other factors can include foreign exchange risk and political risks like expropriation or blocked funds.

As discussed by Froot & Kester (1995), I will disregard the second mentioned technicality since the proposed transaction deals with industrialized nations where there are free flows of capital. Also, I will use the domestic currency tax rate.

The choice then falls below the two distinct methods presented in the following table:

| Initial Analysis | |
|---|--|
| 1. Forecast foreign-currency Free Cash-Flows <ul style="list-style-type: none"> a. Incorporate expected foreign currency inflation rates b. Use appropriate effective tax rate c. Include terminal value | |
| Method A | Method B |
| 2. Determine foreign-currency discount rate <ul style="list-style-type: none"> a. Use project-specific capital structure b. Use project-specific beta | 2. Forecast future exchange rates and convert cash-flows to home currency |
| 3. Calculate present value in foreign-currency | 3. Determine home-currency discount rate <ul style="list-style-type: none"> a. Use project-specific capital structure b. Use project-specific beta |
| 4. Convert to home-currency using the spot exchange rate | 4. Calculate present value in home-currency |

Table 2: Cross-Border Valuation Methods by Froot & Kester, 1995

In this dissertation, I opted to use method B, even though method A will be presented in appendix to demonstrate the consistency between both methods.

2.2.5. Evidence on M&A

There is no clear consensus among academics whether M&A adds value to the acquiring companies. The topic has been widely studied, with academics trying to first categorize transactions and then conclude which type of acquisitions adds or destroys value.

Most academics seem to concur that the selling shareholders are the biggest beneficiaries of M&A transactions (Sirower & Sahni, 2006). However, considering the acquiring shareholders

some mention that these are harm by the transaction (Sirower & Sahni, 2006), while others refer that, even if value is not created, it tends to be preserved, meaning that investors tend to cover, at least, their cost of capital (Bruner, 2004). At a macroeconomic level, M&A transactions seem to create value (Sirower & Sahni, 2006). Cross-border transactions follow the same pattern as the overall M&A activity.

At last, there is also empirical evidence regarding the type of deal and the size of the target. Bruner (2004) found that focus rationales pay more than diversification, while Koller, et al. (2010) mention that roll-ups, transformational mergers and “buying cheap” strategies do not create value, on average. Regarding the size of the target, some argue that larger deals tend to have higher returns than smaller deals (Bruner, 2004), while others claim that companies that do smaller deals can succeed and outperform their competitors (Rehm, et al., 2012).

2.2.6. M&A trends

The value of global M&A increased in 2015, achieving the highest level ever registered, \$4.7 trillion, while the volume decreased¹. This trend was caused, to a certain extent, by a large number of mega-deals such as Altice’s acquisition of Cablevision², AB InBev-SABMiller³, and Pfizer-Allergan⁴.

Despite global concerns, it seems that U.S. acquirers were encouraged by low interest rates, a bull stock market, a strong dollar, improved economy and abundance of excess cash (Tiemann, et al., 2015). These reasons contributed for the Healthcare sector to be the most active during 2015, followed by Technology and Energy & Power. Cross-border M&A appears to have increased by 27% compared to previous year, accounting for one third of overall M&A volume⁵.

For 2016, several studies indicate a positive trend for M&A activity. In fact, they predict that both the number of deals and the average deal size will increase over the current year. It looks like M&A continues to be the preferred growth strategy, being supported by the favorable macroeconomic indicators (Miller, et al., 2016). Cross-border transactions will continue to rise as

¹ According to Thomson Reuters, M&A review

² Pending approval from New York state regulators

³ Pending approval and solving regulatory constrains in certain countries

⁴ The transaction was terminated due to “forced” government conditions

⁵ Thomson Reuters News 01-01-2015

corporations are expected to seek higher external growth (Garay, et al., 2015). In a nutshell, most studies predict 2016 to be another exciting year in the M&A industry.

3. Industry Review

Considering the proposed transaction, I will analyze the Transportation & Logistics (T&L) industry, focusing on three segments: *freight forwarding* (FF), *logistics*, and *Courier, Express and Parcel* (CEP).

3.1. Overall view

3.1.1. Business Segments

Freight forwarding in its simplest form is an asset light business model where forwarders buy capacity from carriers (airlines, trucking companies, ocean carriers) and offer this capacity to their customers as part of organizing their transportation requirements. Some well-established firms usually have their own fleet, transforming the business into a heavy asset one. A firm operating in this sector also offers services related to tracking and tracing, warehousing, customs brokerage and document handling. It comprises air, marine, road and rail freight⁶. Volumes are measured in tons and in TEU (Twenty-foot-equivalent) for the air and sea, respectively.

The second segment, *Logistics*, includes complex logistics and logistics-related services along the value chain that are performed by a third-party logistics service provider (3PL). Generally, services are tailored to a particular industry or customer and are based on long-term contracts (3-5yr). Services can include warehousing, packaging, labeling, transportation, and quality controls.

The third segment, *CEP*, is characterized by high shipping volume with relatively low weights per parcel. *Courier services*, commonly used for short-distances, transport spontaneously sent shipments that are highly valuable and require a permanent personal supervision of the shipment. *Express* is associated with time-bound delivery, where the shipment is delivered within a day or two. At last, *Parcel* services concentrate on the transport of individual shipments that, due to their standardized size, are easier to handle when compared with the transport of general cargo, which has various forms and sizes.

Naturally, there are some overlaps in the segments, especially between *freight forwarding* and *logistics*, with a large number of companies offering either segments or at least incorporate one or two sub-segments of *freight forwarding*, including road and rail, in the *logistics* area. For

⁶ The air freight division is defined as revenues generated from transportation of freight, mail, express, and diplomatic bags by air, while the marine freight sector is related to freight transportation by dry bulk cargo and ship container, by sea and ocean going vessels. The road and rail freight segments will not be analyzed in this dissertation since the companies involved in the transaction do not operate directly in this area

these reasons, when not possible to clearly separate, I will present the *freight forwarding* and *logistics* as one segment, in order to avoid double counting.

3.1.2. Market size and evolution

The T&L market has been increasing over the last 4 years, with a CAGR of 3.9%. Considering individual segments, *logistics* is the largest, representing 28% in 2014, followed by *CEP* with 27%. Studies indicate that the overall market will have a CAGR of 5.6% until 2019, with *logistics* leading the upward trend with a 6.8% rate.

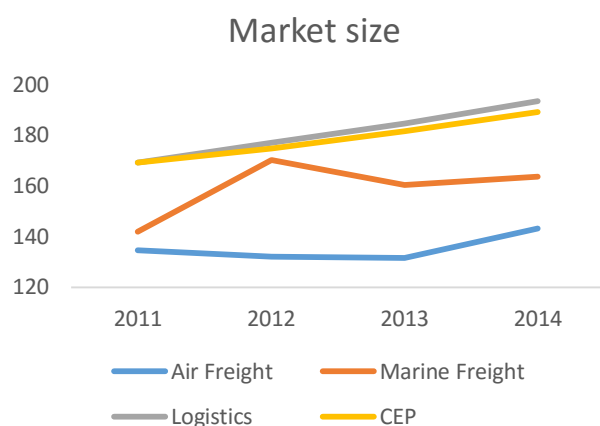


Figure 1: Market size for the period 2011-14 for the specific segments in USD Billions

| USD Bn | 2014 | CAGR 11-14 | CAGR 14-19 | Source |
|---------------------------|--------------|-------------|-------------|-----------------------|
| Freight Forwarding | 306.8 | 3.5% | 6.3% | Market Line |
| Air | 143.1 | 2.1% | 6.3% | Market Line |
| Marine | 163.7 | 4.9% | 6.3% | Market Line |
| Logistics | 193.4 | 4.6% | 6.8% | TI Contract Logistics |
| CEP | 189.1 | 3.8% | 3.4% | TI Contract Logistics |
| Total | 689.3 | 3.9% | 5.6% | |

Table 3: Market size for 2014, historical CAGR 2011-14, and estimated CAGR for 2014-19

Source: Market Line and TI Contract Logistics

3.1.3. Major players

Considering the three sub-segments together, there are 3 major players who seem to dominate the overall market: DHL, UPS, and FedEx. Considering each sub-sector we find other players, as presented in table 4. In annex 1, you can find some key indicators of the market concentration for each segment.

Being this an industry intense in competition, the major players have been undertaking consolidation plans. Please refer to annex 2 for a description on the M&A activity in the sector.

| <i>Segment</i> | <i>Major Players</i> |
|---------------------------|--|
| <u>Freight Forwarding</u> | |
| - Air | DHL, Kuehne+Nagel, DB schencker, Panalpina World Transport |
| - Maritime | Kuehne+Nagel, DHL, DB schencker, Panalpina World Transport |
| <u>Logistics</u> | DHL, Kuehne+Nagel, CEVA, Norbert Dentressangle |
| <u>CEP</u> | DHL, FedEx, UPS, TNT |

Table 4: Top 4 players per segment

Source: DHL

3.2. Porter's 5 forces

The Porter model of 5 forces allows us to better understand the industry. Overall, considering all segments I find that there is moderate to strong degree of rivalry. The bargaining power of supply appears to be one of the most stressing factors, mostly due to the small number of suppliers of fleet, fuel and infrastructure, while the threat of new entrants seems to be the least concern, most likely due to the high entry costs and strong regulation. In annex 3, you can find an individual and detailed Porter analysis to the segments (FF&L and CEP).

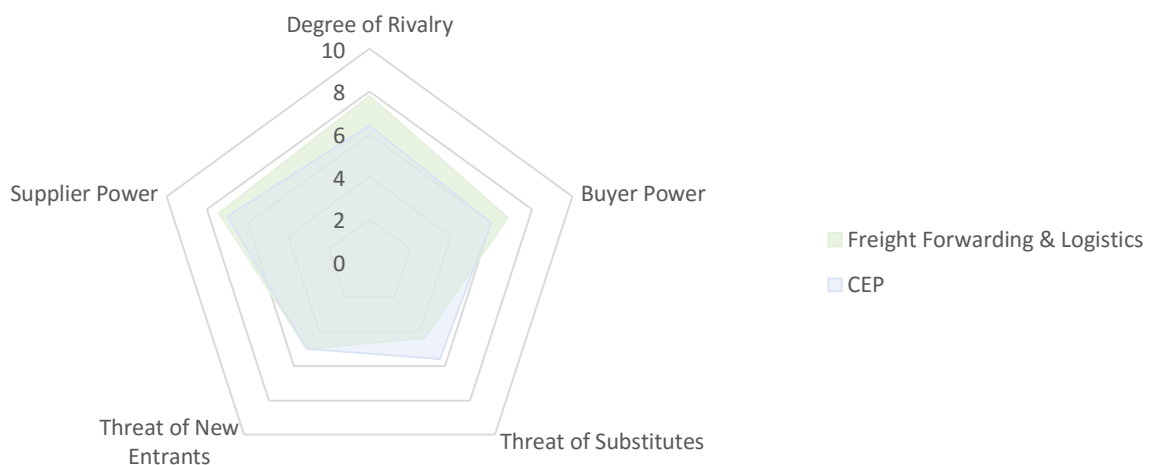


Figure 2: Porter's 5 forces model for the FF&L and CEP segments

3.3. Key drivers, Trends & Challenges

The major drivers that affect T&L market can be divided into two broad groups: exogenous and internal drivers. Under the first group, we find factors such as globalization, GDP growth, major input prices (fuel), state intervention (regulation and creation of infrastructures), demographic development and demand, while internal factors deal with efficiency (gains created through technological progress, economies of scale with denser networks, and process improvements), service orientation and innovative technologies. There are seven megatrends and respective challenges that are expected to shape the T&L industry in the long-run (Nangia, et al., 2015):

| Trend | Description | Possible action |
|--|---|--|
| Megacities and emerging trade routes | The slowdown of the emerging countries' growth rates and the expansion of certain cities and trade networks | Identify these above average growth areas and establish a position |
| New solutions from unexpected competitors | The appearance of crowdsourcing in shared transportation for cargo services (innovative peer-to-peer platforms where consumers use other economic agents' assets and competencies to ship cargo) is being planned in other transportation segments, specifically in the B2B segment | Study possibilities to convert a threat into an opportunity by reducing the "last mile" costs |
| The digital revolution | Related to reduced customer acquisition cost, partial or full automation of processes (e.g. driverless trucks, warehouse robotics), the increase in collection of data, emergence of e-commerce, and access to price aggregators platforms | Explore opportunities related to data providers, to optimize network routes, and to provide information on the e-commerce segment trends |
| High Capex as a prerequisite for competitiveness | There is an inverse relationship between economic profit and the average age of fleets due to: technological improvements that make new fleets more efficient; and environmental regulations that make older fleets banned | Explore leasing opportunities and plan the need to increase capacity. Also, use this factor to take advantage as an incumbent player |
| The impact of deregulation | Deregulation may increase competition in the industry | Study possibilities to defend your market as well as to enter new previously regulated ones |
| Consolidation and cooperation | M&A is a crucial competency in the industry with a clear tendency to consolidation. Joint ventures and strategic cooperation are also expected to have a significant role | Explore potential acquisitions and partnerships |
| Increased volatility | There are high levels of uncertainty related to input factors and customer demand (demand peaks that occur over Christmas or Black-Fridays are getting higher and shorter) | Increase the agility in resource allocation and have a flexible strategy to balance between fixed and variable capacity |

Table 5: Industry trends and possible actions

4. Company Overview

4.1. United Parcel Service

UPS was founded in 1907 in Seattle, U.S., and is one of the biggest package delivery companies today, having operations in more than 220 countries with 444,000 employees, approximately. The company separates its business into three segments: *U.S. Domestic Package*, *International Package*, and *Supply Chain & Freight*.

4.1.1. Business Segments

The first segment includes time-definite, money-back-guarantee, small package delivery services throughout the U.S.. The international segment includes the small package operations in Canada, EMEA, Asia-Pacific, and Latin America. These two segments correspond to the CEP sector previously explained. The last segment focuses on supply chain management, freight distribution through air and sea, customs clearance, trade management and international trade consulting service. It matches the FF&L segment earlier explained.

The following graphs display the revenues and operating profit by segment in 2015, where it can be concluded that certain segments are more profitable than others. In fact, the *International Package* has the highest operating margin, 17.6%, where the *Supply Chain and Freight* presents the lowest 8.1%.

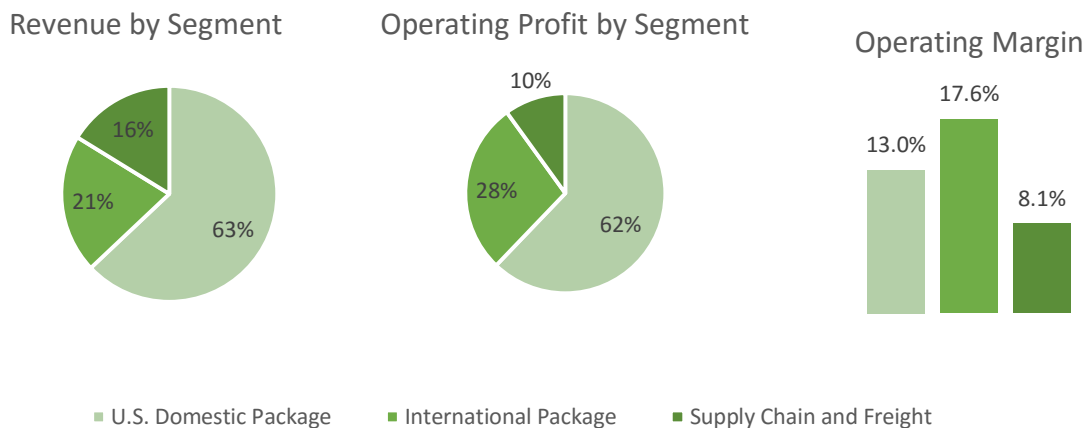


Figure 3: Revenue, Operating profit, and Operating Margin by segment in 2015

4.1.2. Strategy

In order to become less dependent on the parcel segment, UPS has been increasing the scope of offered activities over the last 15 years. According to David Abney, appointed CEO in 2014, and the latest annual reports, the major strategies deal with:

- the expansion of global trade by investing in both existing and new networks in developed and emerging countries;
- the growth of e-commerce in the retail sector by creating and developing solutions such as UPS SurePost, UPS i-parcel, and UPS My choice⁷;
- the creation of numerous industry-specific, integrated solutions, with special focus on Healthcare, High-tech and Aerospace segments;
- the expansion of logistics outsourcing, by moving further into client's supply chains.

In order to pursue these strategies, the company has had a strong history of acquisitions, having completed 15 over the last 5 years⁸. To better understand the strategy of the company, please refer to annex 4, which presents a SWOT analysis.

4.1.3. Shareholder Structure

The company has 99.94% of the outstanding shares in free float, leading to a highly dispersed shareholder structure with the top 10 shareholders detaining 28.08% of the overall number of shares. The stockholders are mostly institutional (investor managers and brokerage firms), who detain 64.8% of the company⁹. Regarding the geographic distribution, the majority of shareholders, 61%, are located in North America, followed by 6.5% in Europe. Further detailed and visual information is displayed in annex 5.

⁷ UPS SurePost: service offered where UPS carries the package until the destination city, but then the U.S. Postal Services does the final delivery; UPS i-parcel: specific service to e-commerce shipments; UPS My Choice: access points for end customers to pick-up their parcels if they wish not to receive it at home

⁸ Some of the deals are detailed in annex 8

⁹ Nonetheless, 0.1% of the shareholders are strategic, representing the management team

4.1.4. Financial Performance

Overall, the company presents solid, positive financial results with higher profitability margins than the industry, supported by the strong operating performance. *Revenue* has been increasing over the last 6 years with a CAGR of 3.3%. *Net Income* has fluctuated significantly along the years, achieving a minimum of \$0.4Bn in 2007, 1.2% of revenues, and a maximum of \$4.9Bn in 2015, representing 8.3% of revenues. The low *operating margin* in 2007 and 2012 is related to 3 and 1 non-recurring events, respectively¹⁰.

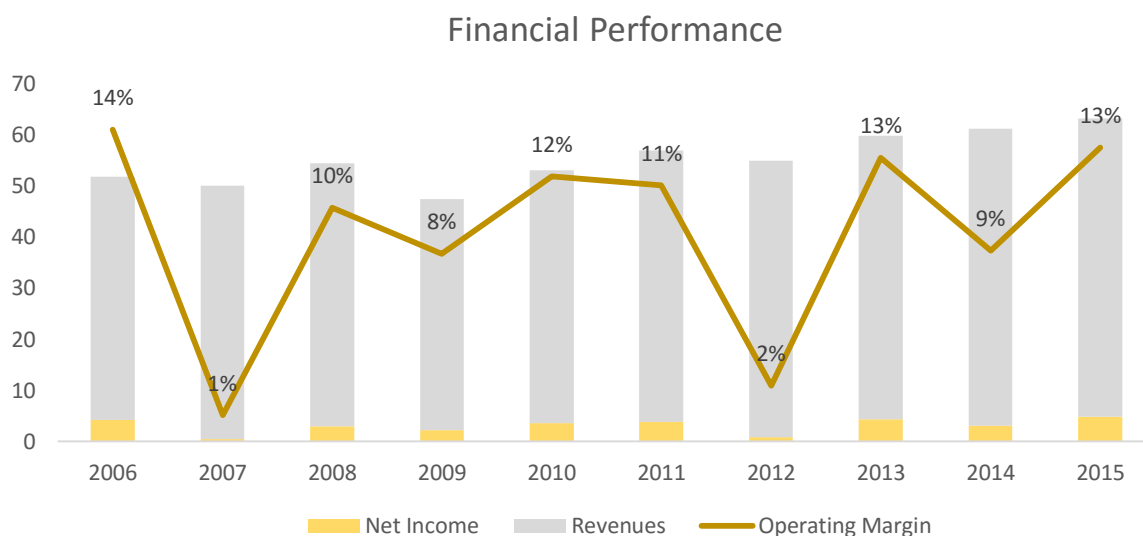


Figure 4: Net Income, Revenues and Operating Margin, for the period 2006-15, in USD Billions

The relative contributions of each segment to total revenue have been fairly stable over the period, even though the growth rate in each segment has varied significantly across time. For instance, in 2015, total revenues increased 0.2%, being irregular among the segments: the *Domestic Package's* revenues increased 2.5%, the *International division* decreased 6.5%¹¹, and the *Supply Chain & Freight's* revenues increased 0.8%.

¹⁰ In 2007, the events were: adjustments in workers' compensation claims, withdrawal from a significant high margin operation in Asia, and aircraft impairments, while in 2012 it occurred an adjustment to the benefit plans mark-to-market charge

¹¹ The decrease was mostly driven by currency effects rather than volume and prices, since these two increased

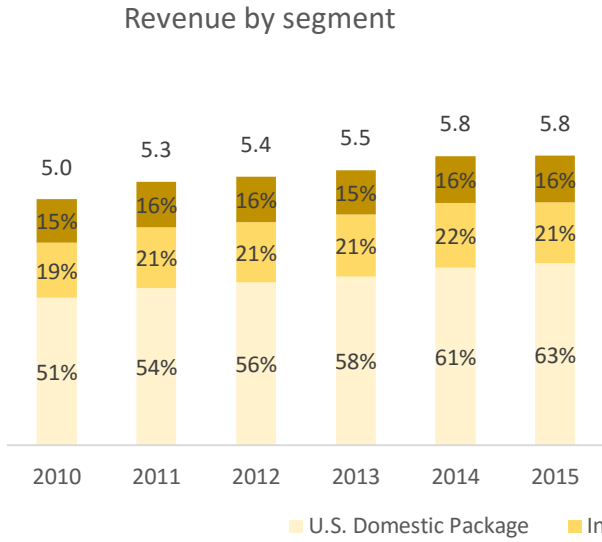


Figure 5: Revenue by segment for the period 2010-15, in USD Billions

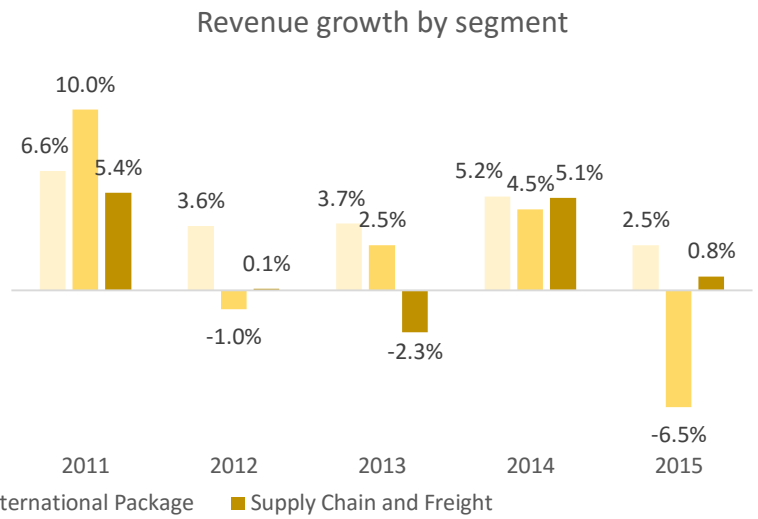


Figure 6: Percentage change in revenues by segment for the period 2011-15

The relative profitability of each segment also appears to have been stable over the period, however the *International division* seems to have an important weight within the overall profitability, by gaining importance over the last years.

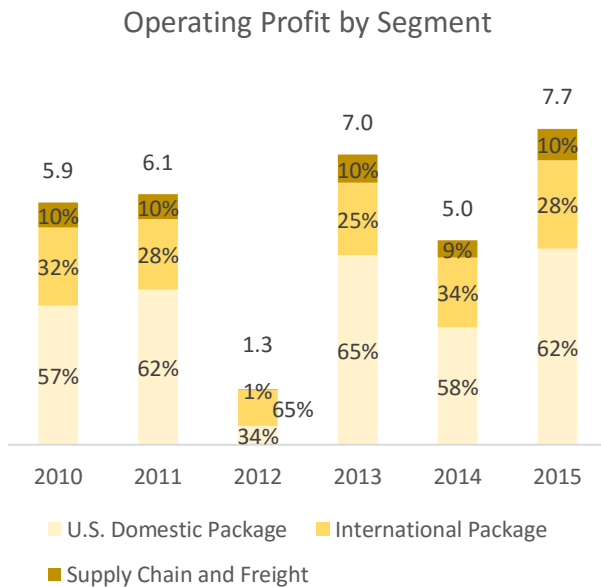


Figure 5: Operating Profit by segment for the period 2010-15

| Operating Margin | 2013 | 2014 | 2015 |
|--------------------------|-------|-------|-------|
| Domestic package | 13.5% | 8.0% | 13.0% |
| International package | 14.5% | 14.7% | 17.6% |
| Supply chain and freight | 7.5% | 4.6% | 8.1% |

Table 6: Operating Margin by segment for the period 2013-15

In terms of global costs, these have been increasing at a modest rate, with a CAGR 2011-15 of 3.03%. The major costs are related to labor, approximately 61%, and COGS, 21%. Regarding costs as a percentage of revenues, these have been fairly stable, with the exception of COGS.

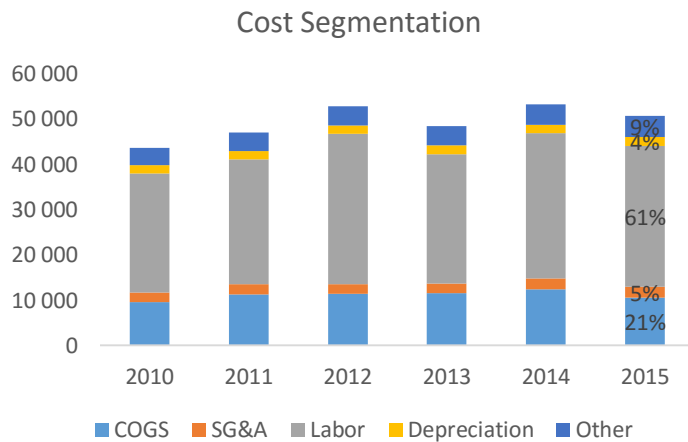


Figure 8: Cost segmentation for the period 2010-15, in USD millions

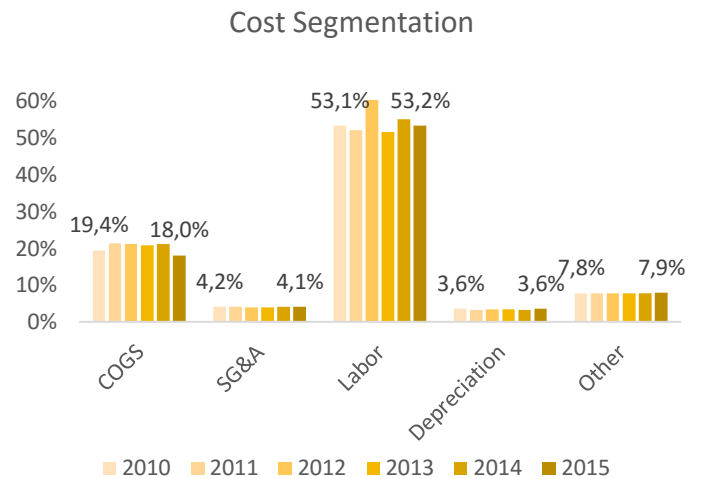


Figure 9: Cost segmentation as a percentage of revenues, for the period 2010-15

Through table 7, it is clear the improvement of UPS's performance over the last years and compared to the industry, specifically regarding profitability margins. The Debt-to-Equity ratio has been increasing over the last years, however, Net-Debt-to-EBITDA decreased in the last year. The current ratio is lower than the industry, but not significantly, while asset turnover seems to be higher and can indicate higher efficiency with the asset resource allocation. In terms of average account receivables days the company seems to behave similarly to the industry, while for the account payables, UPS presents a higher value, indicating a better working capital management than the industry. Most likely, UPS is able to perform in such way due to its big size when compared to other players.

| Ratios | 2013 | 2014 | 2015 | Industry Median |
|------------------------------|-------|-------|-------|-----------------|
| Profitability | | | | |
| Gross Margin | 79.2% | 78.8% | 82.0% | 47.4% |
| Operating Margin | 12.7% | 8.5% | 13.1% | 7.1% |
| Net Margin | 7.9% | 5.2% | 8.3% | 3.3% |
| Pretax ROA | 17.8% | 12.9% | 19.9% | 8.0% |
| Reinvestment Rate | 36.0% | 12.7% | 95.2% | 8.4% |
| Liquidity | | | | |
| Current Ratio | 1.88 | 1.30 | 1.23 | 1.59 |
| Leverage | | | | |
| Debt/Equity ¹ | 0.13 | 0.12 | 0.16 | - |
| (Total Debt - Cash) / EBITDA | 0.59 | 0.95 | 0.88 | 0.88 |
| Operating | | | | |
| Avg. A/R Days | 41.6 | 41.4 | 43.3 | 42.5 |
| Avg. A/P Days | 75.6 | 77.5 | 92.8 | 51.5 |
| Asset Turnover | 1.48 | 1.63 | 1.58 | 1.55 |
| ROIC | 14.7% | 10.9% | 17.8% | - |

¹ Market Values

Table 7: Key operating and financial ratios

Source: Reuters, UPS financials

4.1.5. Stock Performance

Over a 6-year period UPS stock had a cumulative return of 58% while the DJTI had 68% and the S&P500 62%. In absolute terms, the stock price increased by a 1.82 factor over this same period, achieving \$104.88 on the day prior to the valuation. Regarding *Earnings* and *Dividends per share*, the former has varied significantly over the past years whereas the latter has developed an upward trend with a CAGR of 9.2%.

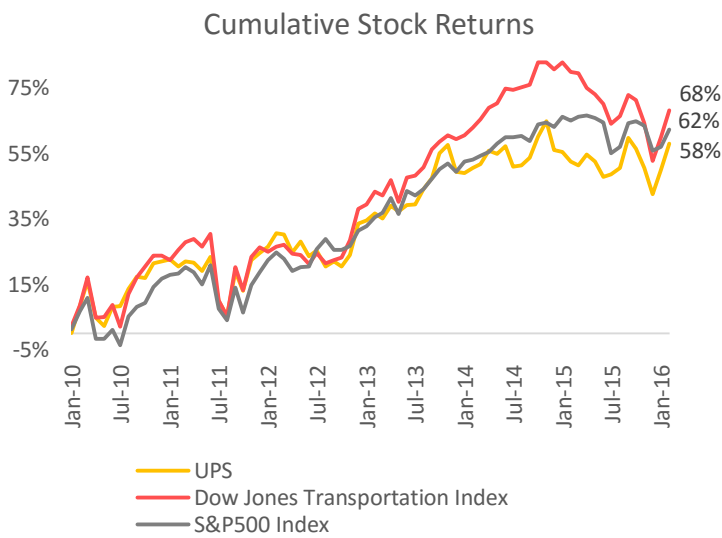


Figure 10: Cumulative monthly Stock Returns of UPS, DJTI, and S&P500 Index, for the period 01-Jan-2010 to 23-03-2016

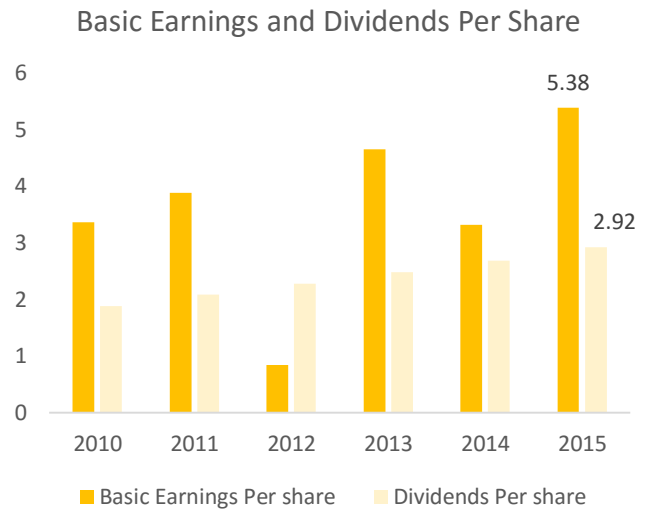


Figure 11: Basic EPS and DPS per share of UPS for the period 2010-15

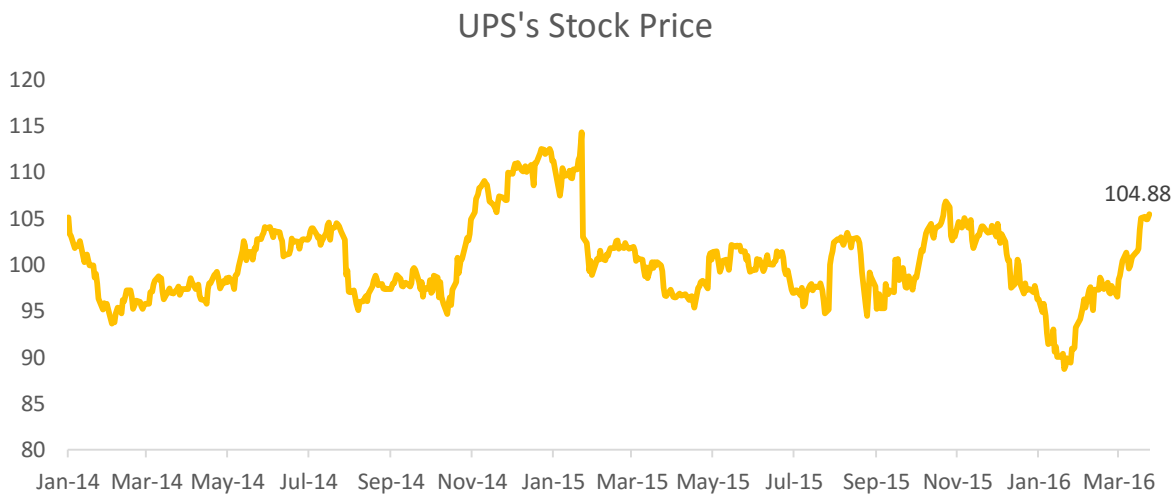


Figure 12: UPS's closing price for the period 01-Jan-2014 to 23-Mar-2016, in USD

4.2. Panalpina World Transport

4.2.1. Business Segments

Panalpina is one of the leading providers of supply chain management, with operations in all 6 continents, offices and partnerships in more than 75 and 90 countries respectively, and employing 15,000 people. It offers end-to-end supply chain services, specializing in intercontinental air and ocean freight, and value-added logistics services. With origins that go back to 1935, it is based in Basel, Switzerland, and divides its operations into three main segments: *Air Freight*, *Ocean Freight* and *Logistics*¹². These segments correspond to the FF&L earlier explained.

The subsequent graphs show that not all segments are equally profitable, since the air freight segment has a 3.4% operating margin whilst the Logistics has 0.3%.

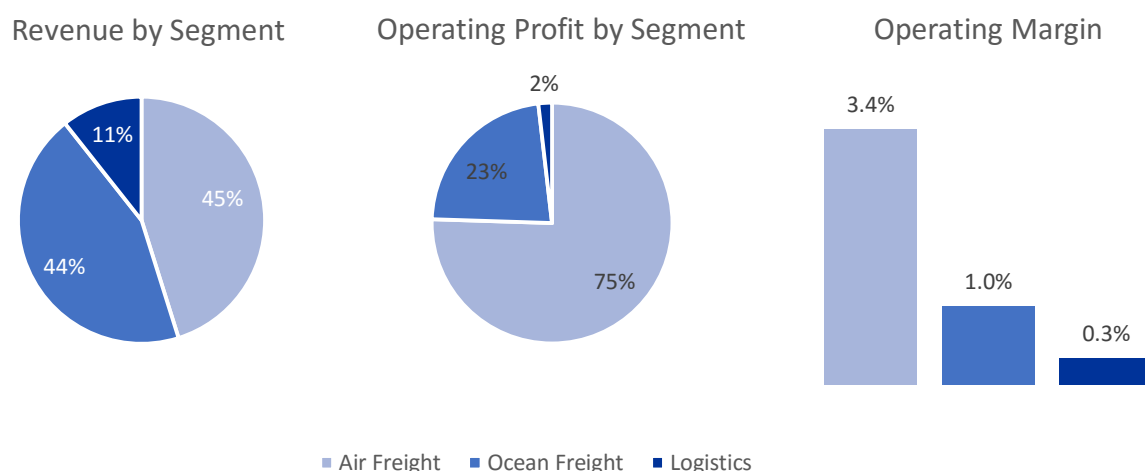


Figure 6: Revenue, Operating profit, and Operating Margin by segment in 2015

4.2.2. Strategy

Since the company became listed on the Swiss stock exchange in 2005, it has been developing a diverse portfolio of services while creating core competencies to allow growth in the future. Peter Ulber, CEO since 2013, shed a light on the two major strategies of Panalpina in the 2015 AR: explore opportunities to grow organically and improve both productivity and cost optimization.

¹² The company focuses on ten core industries: automotive, chemicals, consumer and retail, energy, fashion, healthcare, hi-tech, manufacturing, perishables and telecommunications

For the first objective, the company intends to: expand the global network in specific industries such as chemicals, healthcare and perishables; offer additional services in the ocean freight segment; and increase the expenditure in innovation, under which it proposes to investigate new ways of doing business and adding value to customers. In order to discover these innovative solutions, the company intends to work with universities, customers and partners. The second objective is linked to an initiative named *Operations Transformation Program* (OTP), which started in 2014, and aims to reduce costs across all businesses and geographies¹³.

To better understand the strategy of the company, please refer to annex 6, which presents a SWOT analysis.

4.2.3. Shareholder Structure

The shareholder structure of Panalpina is concentrated, having only has 51.46% of its outstanding shares in free float. The top 10 shareholders own 86.29% of the overall shares, with one shareholder representing 45.9%. Regarding the type of investor, it is fairly balanced between strategic entities, 48.5%, and investment managers, 44.6%, while the investors' location is mostly concentrated in Europe, 64.7%. Further detailed and visual information is displayed in annex 7.

4.2.4. Financial Performance

Revenues have been fluctuating moderately, with a growth rate characterized by an inverted U-curve over the last years (2011-15). Net income also presents some uncertainty, achieving negative values in 2010 and 2012, -F0.27 and -0.71Bn respectively, but presenting an upward trend afterwards. From 2012 onwards, the evolution of the operating margin reflects an annual upward trend. In 2015, *revenues* dropped 12.7%, achieving F5.9Bn, net income increased by 2% to F0.09Bn, while the operating margin increased by 0.3 percentage points.

¹³ Other strategy that has defined the company over the last years is the wide number of partnerships and acquisitions. In 2015, the company made two small acquisitions, Airflo, a freight forwarder for flowers and vegetables, and Afifi, an Egyptian freight forwarder

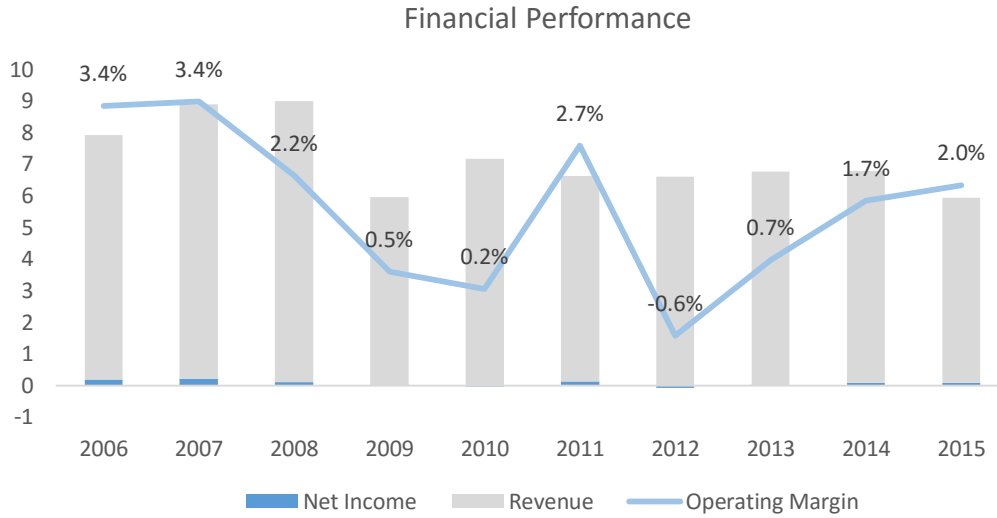
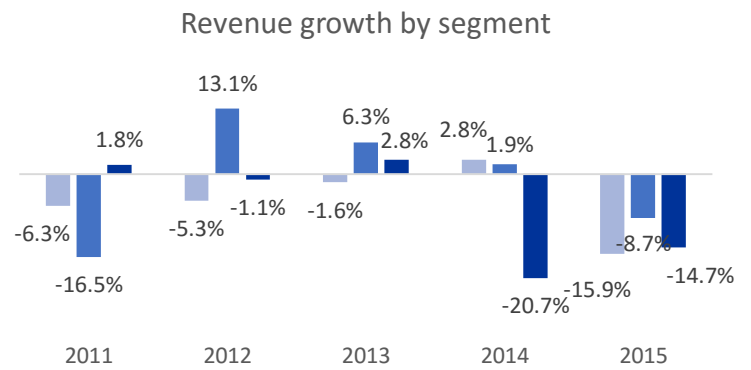
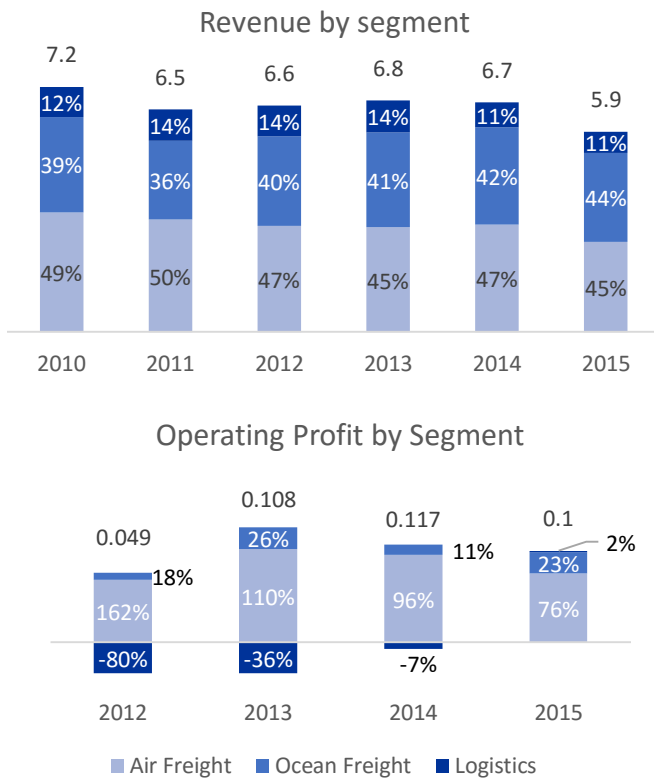


Figure 7: Net Income, Revenues and Operating Margin, for the period 2006-15, in CHF billions

In terms of relative contribution to total revenues, it is clear that the *ocean freight* segment has gained importance, while the *air freight* has been decreasing its relative weight to revenues.



| Operating Margin | 2012 | 2013 | 2014 | 2015 |
|-------------------------|-------------|-------------|-------------|-------------|
| <i>Air Freight</i> | 2.57% | 3.90% | 3.57% | 3.35% |
| <i>Ocean Freight</i> | 0.34% | 1.01% | 0.46% | 1.03% |
| <i>Logistics</i> | -4.40% | -4.26% | -1.13% | 0.34% |

Figure 8: Revenue by segment; Percentage change in revenues by segment; and Operating Profit by segment for the period 2010-15, in CHF Billions

Table 8: Operating Margin by segment for the period 2013-15

However, more interesting is to analyze the operating profits and the profitability margin presented in figure 15 and table 8. Consistent with the reduction of revenues, the *air freight* segment has also been losing relative importance in the operating profit, while the *ocean freight* has been increasing over the period. The *logistics* segment has been responsible for negative operating profits since 2012, but it assumed a positive value of F2.1Mn in 2015. In terms of operating margin, *air freight* has the highest margin, followed by *ocean freight*. In all margins, there has been an upward trend, mostly related to the cost optimization policy the company has been developing.

Regarding *total operating costs*, these have increased from 2011 to 2013, followed by a downward trend until 2015, year in which operating costs decreased by 13%. The cost structure is mainly dependent on *COGS*, representing 77% of the total value in 2015, followed by *labor*, accounting for 16%. In absolute terms, *Depreciation/Amortization* have been increasing constantly, presenting a CAGR of 1.69% for 2010-15. *Labor costs* have also been following this upward trend with a CAGR of 0.12%. In terms of costs as a percentage of *revenues*, the proportions have been increasing, with the exception of *COGS*.

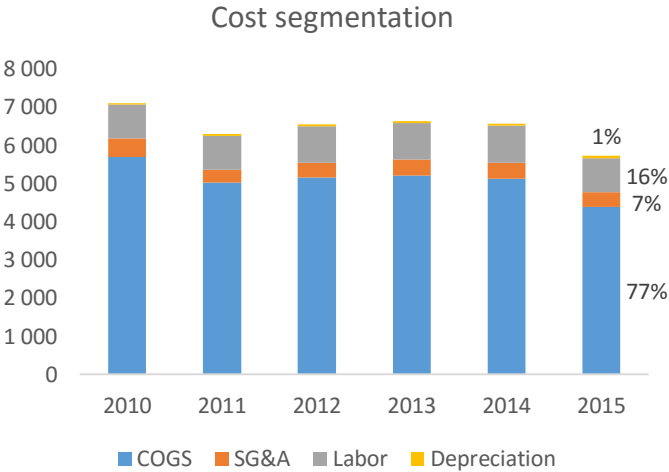


Figure 16: Cost segmentation for the period 2010-15, in CHF millions

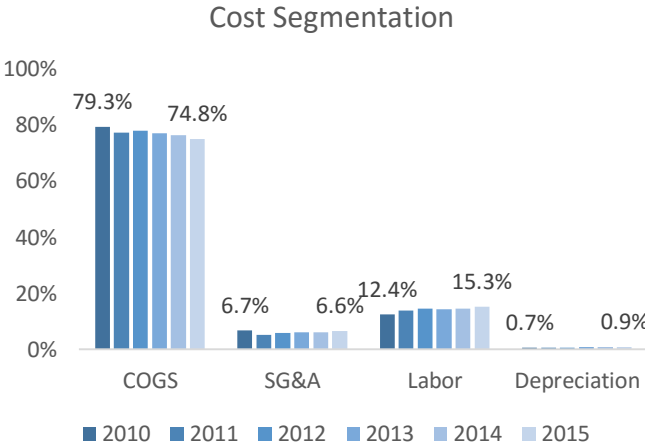


Figure 17: Cost segmentation as a percentage of revenues, for the period 2010-15

The following table compares key ratios across the previous 3 years as well as with the industry. In terms of profitability, despite the positive trend, Panalpina still presents lower gross, operating and net margins than the industry median. ROE and Pretax ROA have been steadily increasing, and, with the exception of 2013, they are similar to the industry median. The current ratio is higher than the industry indicating that the company meets its short term obligations in an easier way. The leverage ratios are considerably lower than the industry, indicating the low, close to zero, long-term debt of Panalpina. Operating ratios seem to be in line with the industry median, except the account payables days, which are significantly lower.

| Ratios | 2013 | 2014 | 2015 | Industry Median |
|----------------------|-------------|-------------|-------------|------------------------|
| Profitability | | | | |
| Gross Margin | 23.1% | 23.6% | 25.2% | 46.9% |
| Operating Margin | 0.7% | 1.7% | 2.0% | 5.8% |
| Net Margin | 0.2% | 1.3% | 1.5% | 2.1% |
| ROE | 1.7% | 12.3% | 12.9% | 12.6% |
| Pretax ROA | 1.8% | 5.9% | 6.4% | 5.5% |
| Reinvestment Rate | - | 3.1% | 0.7% | 3.7% |
| Liquidity | | | | |
| Current Ratio | 1.46 | 1.52 | 1.56 | 1.02 |
| Leverage | | | | |
| Assets/Equity | 2.79 | 2.68 | 2.69 | 3.04 |
| Debt/Equity | 0.00 | 0.00 | 0.00 | 0.08 |
| Operating | | | | |
| Avg. A/R Days | 59.8 | 59.7 | 63.0 | 62.9 |
| Inv Turnover | 58.9 | 50.5 | 49.3 | 49.3 |
| Avg. A/P Days | 40.5 | 39.7 | 40.9 | 104.1 |
| Fixed Asset Turno | 54.25 | 60.10 | 64.08 | 6.61 |
| ROIC | 1.4% | 10.1% | 10.7% | - |

Table 9: Key operating and financial ratios

Source: Reuters

4.2.5. Stock Performance

From 2010 to the valuation date, Panalpina had a cumulative return of 37% while the DJTI had 68% and the Swiss Market Index (SMI) presented 18%. In absolute terms, the stock price increased by a 1.72 factor over this same period, achieving F105 on the day prior to the valuation. EPS changed expressively over the last years, assuming the lowest value in 2012, -F3.05, while Dividends, except for 2010 when no dividend was declared, tend to be more constant with a CAGR for 2011-15 of 15.0%

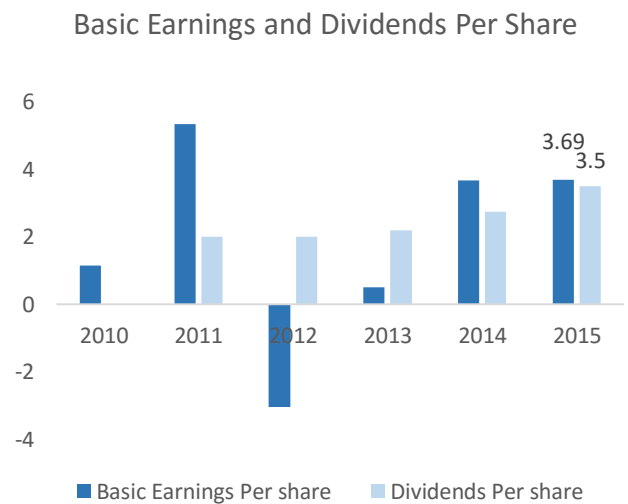
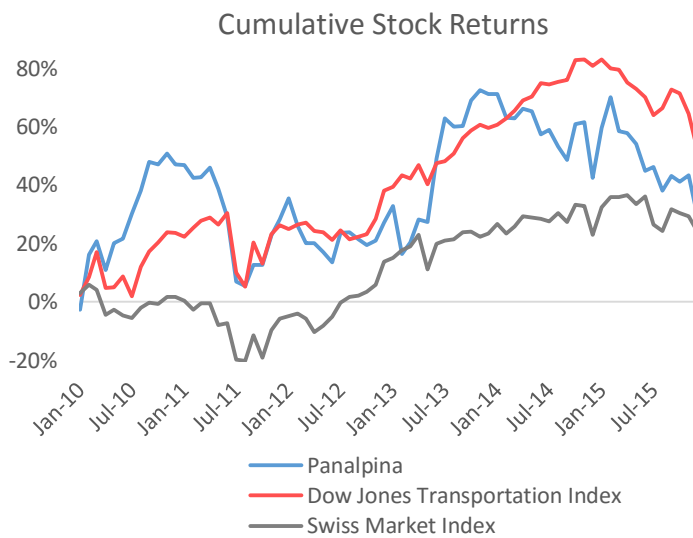


Figure 18: Cumulative monthly Stock Returns of Panalpina, DJTI, and S&P500 Index, for the period 01-Jan-2010 to 23-Mar-2016

Figure 19: Basic EPS and DPS for the period 2010-15, in CHF



Figure 9: Panalpina's closing price for the period 01-Jan-2014 to 23-Mar-2016, in CHF

5. Deal Rationale

Traditionally, UPS core and original segment has been CEP, accounting for 63% and 21% of total revenues in 2015, respectively. The company entered the freight business in 2004 with the acquisition of Menlo Worldwide Forwarding, and despite its development, UPS has used this acquisition strategy to grow and consolidate in this industry, by acquiring companies with deep expertise and know-how (annex 8).

When looking at market growth rates as presented in section 3.1.2., it becomes clear that the non-core segment of UPS presents much higher CAGRs than the CEP for 2014-19. This is supportive and indicative that UPS should develop this segment.

In fact, one can argue that Coyote's acquisition occurred in 2015, already shows the interest on the segment and complements UPS in terms of road freight and logistics area. However, Panalpina, being one of top 5 companies in air and ocean freight segments, with more than 80 years of expertise, emerges as the indicated company to strengthen UPS position in this fast growing, asset-light business.

Panalpina, having a strong and premium reputation, will not only enable a higher level of cross-sale to clients, through the possibility of integrated solutions, but also benefit UPS in terms of asset and network utilization. On the other hand, UPS will impose its efficient cost structure, seen through the considerably higher margins than the industry, and its leading power position in order to optimize and restructure Panalpina.

6. Valuation

In order to have a clear idea about the impact of the fuel prices in the T&L sector, I retrieved data since 2006 from the ARs so that the 2008-09 change in fuel price was incorporated. Depending on the detail available in each company's AR, you can find more or less segmented rubrics. Nonetheless, revenue estimation tries to be as detailed and segmented as possible, which then converts to a consolidated base when estimating costs, capex and working capital¹⁴.

6.1. United Parcel Service

6.1.1. Cash-flow Projections

6.1.1.1. Revenues

As explained, UPS has three separate segments: U.S. Domestic Package, International Package, and Supply Chain & Freight. In the company's annual reports, further comprehensive segmentation can be found as described in table 10.

| <i>Segment</i> | <i>SubSegment</i> | <i>Description</i> |
|-----------------------------------|--------------------------|--|
| <i>U.S. Domestic Package</i> | Next day air | Commitment to deliver in the next business day |
| | Deferred | Low priority delivery |
| | Ground | Delivery made by ground |
| <i>International Package</i> | Domestic | Small Package shipments where the sender and receiver are from the same country |
| | Export | Small Package shipments where the sender and receiver are not from the same country |
| | Cargo | Palletized shipments, including domestic and export operations |
| <i>Supply Chain & Freight</i> | Forwarding and Logistics | Several value added services (e.g. distribution, post-sales, mail, express) |
| | Freight | Regional, inter-regional and long-haul less-than-truckload ("LTL") services, as well as full truckload services and other international services |
| | Other | All other services not included in the previous segments (e.g. customs brokerage) |

Table 10: Description of UPS's segments

¹⁴ The explicit period in both valuations is 5 years (2016-20). Other sources, such as Bloomberg and Reuters, were used when estimating the cost of capital and they are properly identified. All valuations were made under March, 24 2016

In addition, there is detailed information in the AR regarding price and volume for the first 5 subsegments presented in the previous table, while the remaining are presented with the total revenue information. Hence, the estimation process was more detailed for the first 5 subsegments, which accounted for 83% of total revenues, in 2015.

The following graphs and table present the estimated trends and historical pattern of the subsegments analyzed.

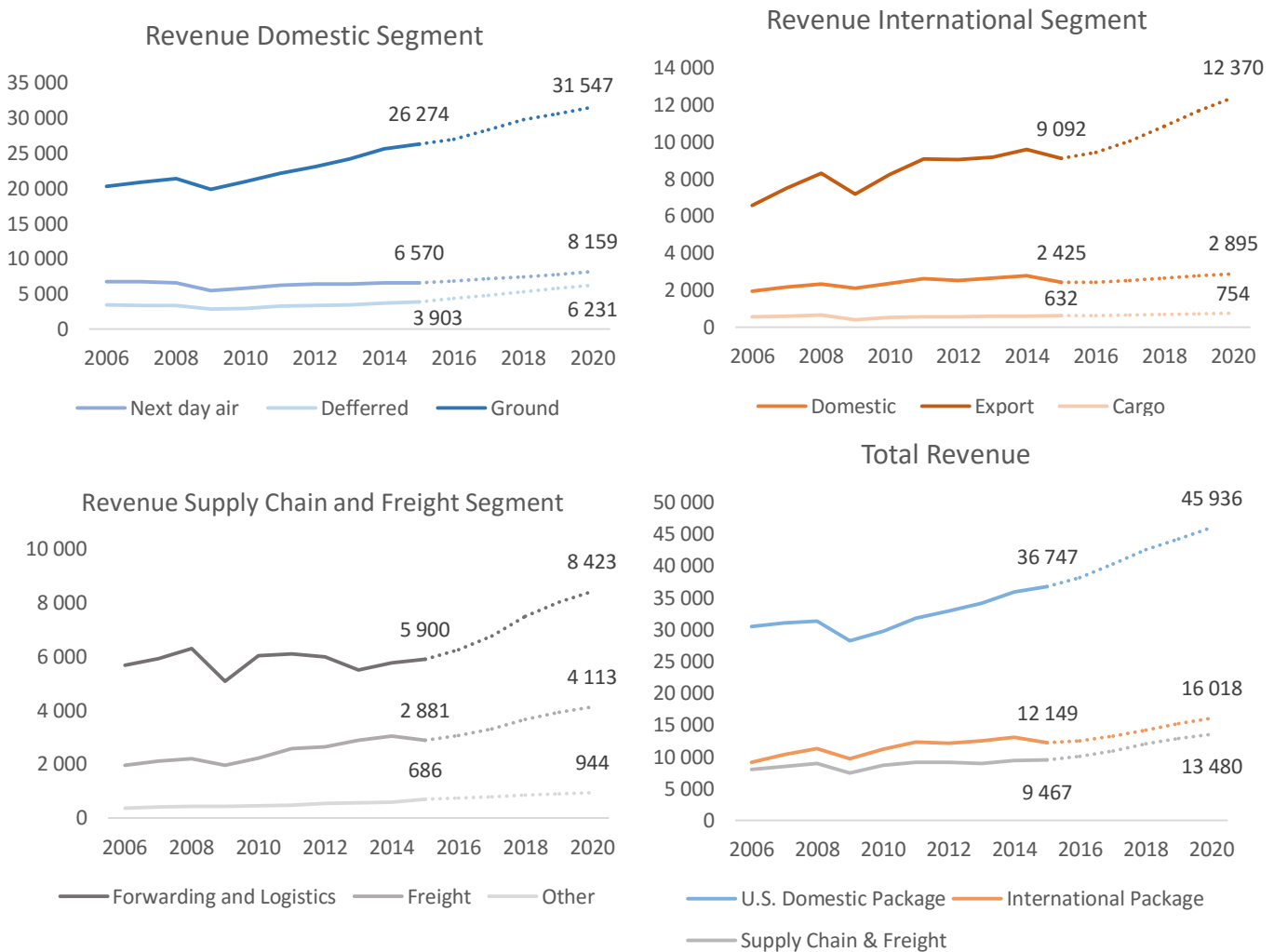


Figure 10: Revenues per segment and subsegment, for the period 2006-15 (historical) and 2016-20 (projections), in USD millions

| Revenue Growth | | | | | | CAGR |
|--|-------------|-------------|-------------|-------------|-------------|-------------|
| | 2016E | 2017E | 2018E | 2019E | 2020E | 15-20 |
| Total Avg daily package volume | 4.1% | 4.6% | 4.4% | 2.6% | 2.5% | 3.6% |
| Total Avg revenue per piece | -0.3% | 1.1% | 1.1% | 1.4% | 1.3% | 0.9% |
| Total U.S. Domestic Revenue | 3.8% | 5.7% | 5.5% | 4.0% | 3.9% | 4.6% |
| Total Avg daily package volume (Domestic & Export) | 3.1% | 4.1% | 5.1% | 4.3% | 2.9% | 3.9% |
| Total Avg revenue per piece (Domestic & Export) | -1.1% | 1.9% | 2.4% | 2.6% | 2.7% | 1.7% |
| Cargo | 3.0% | 4.0% | 4.0% | 4.0% | 3.0% | 3.6% |
| Total International Revenue | 2.0% | 5.9% | 7.4% | 6.8% | 5.6% | 5.5% |
| Forwarding and Logistics | 6.0% | 8.0% | 11.0% | 7.0% | 5.0% | 7.4% |
| Freight | 6.0% | 8.0% | 11.0% | 7.0% | 5.0% | 7.4% |
| Other | 6.0% | 8.0% | 7.0% | 6.0% | 6.0% | 7.0% |
| Total Supply Chain and Freight Revenue | 6.0% | 8.0% | 10.7% | 6.9% | 5.1% | 7.3% |
| Total Revenue | 4.0% | 6.1% | 6.7% | 5.1% | 4.4% | 5.3% |

Table 11: Annual Percentage change in Revenues per segment and subsegment, including when possible volume and price changes, for the projected period, 2016-20

For all the subsegments in the *Domestic* segment, volumes were assumed to continue the high growth trend, which started in 2014 (volume growth reached 6.4%), until 2017 and then reduce to stable growth rates, presenting 3.6% in 2020. The reason behind this two-stage growth model comes from the deep increase in premium air products and continued growth in e-commerce and overall retail sales, powered by lower average prices per piece, mainly related with the decrease in the price of fuel, which increases the number of shipments¹⁵. Out of the three subsegments, *Deferred* presents the higher growth in volume, as can be seen in annex 9. The *average revenue per piece* is related to changes in fuel prices as seen in the historical data from annex 9. With this in mind, the price projections made for 2016-20 account for a reduction in 2016, and gradual increase onwards. Depending on each subsegment, this change is more or less emphasized taking into account historical values, annex 9. *Total operation days*, which are used when computing *Total Revenue*, were assumed to be the same as 2015.

In the *International Segment*, *Domestic and Export* revenues were estimated with a similar methodology to the domestic one. Volume presents a two-stage growth, with higher rates until 2018, partially related to the continued strength made by UPS in the B2C sector and the strong

¹⁵ As the fuel price increases, the predicted number of shipments will not sustain the high growth and stable growth rates will appear

demand from new clients in Healthcare¹⁶. Price follows an analogous model from the *Domestic* segment, decreasing in 2016 and gradually increasing thereafter. The subsegment *Cargo* is estimated directly from its revenue value and it is based on historical values as well as the overall international trend. Again, *Total operation days* were assumed to be the same as 2015.

At last, *Supply Chain and Freight* is estimated to have high growth rates mainly due to the Coyote acquisition, which occurred in 2015. According to UPS's beliefs, total synergies are expected to be fully realized until 2018, hence I present increasing growth rates until such year, which tend to stabilize until 2020. Coyote's acquisition impacts the subsegments *Forwarding and Logistics* as well as *Freight*. For the detailed revenue analysis please refer to annex 9.

Revenue estimation is one of the critical components of the whole valuation process since *Revenues* are the base for other estimated values used in the Cash-flow approach. Therefore, during this process, UPS's forward looking estimates and market growth rates were always taken into account. Such comparison is presented in annex 10.

6.1.1.2. Operational Costs & Margins

COGS, SG&A, Labor and Other Operating Expenses were estimated to change by the percentage of revenues. After analyzing the historical percentage of these costs in revenues, it was assumed the average percentage 2013-15, hence, 20.0%, 4.1%, 53.2% and 7.8%, respectively.

Depreciation and Amortization costs were estimated individually. *Depreciation* was assumed to be the average percentage of Net PPE 2011-15, that is 9.3%, while *Amortization* was predicted by the average percentage of Net Intangible Assets 2011-15, assuming 28.6%.

Since the operational costs are dependent on revenues, *EBITDA* and *Operational profit margins* are stable across the explicit period, around 15% and 11-12%, respectively.

¹⁶ The increase in volume also seems to be explained by the lower price, hence, as the fuel cost increases, high growth rates will not be sustained

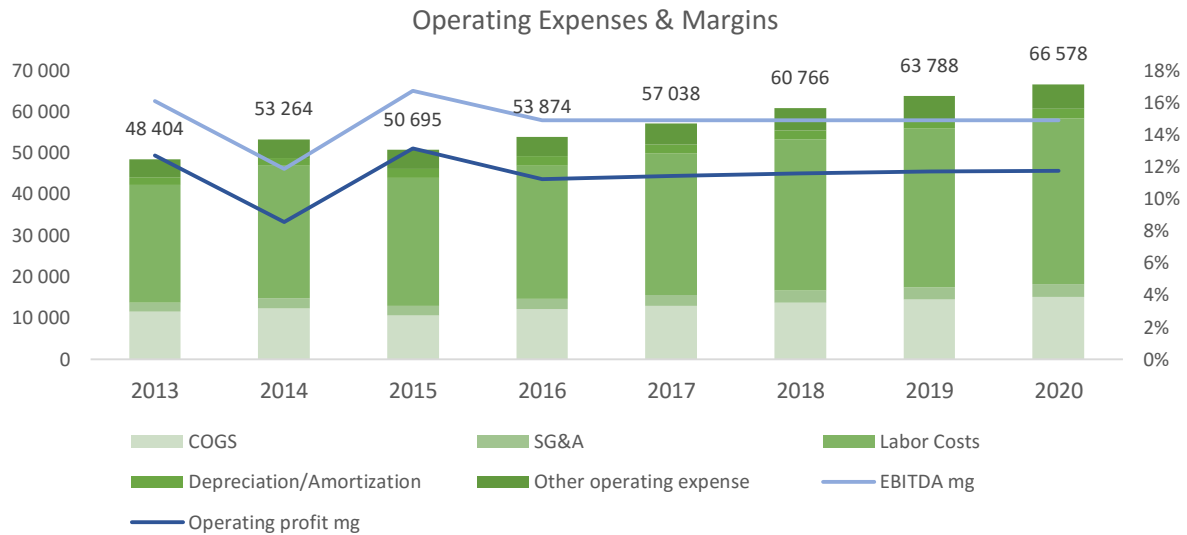


Figure 11: Operational Costs in USD millions, EBITDA and Operating Profit margins, for the historical 2013-15 and the projected 2016-20

6.1.1.3. Capital Expenditures & Net working Capital

Please refer to annex 11 for detail on the computations of these items.

6.1.1.4. Free Cash Flow to the Firm

Based on the previous projections, and assuming a tax rate of approximately 34%, average effective tax rate 2013-15, I compute the following FCFF presented in table 12. The growth rate assumed in the terminal value, 1.98%, comes from IMF's projection of GDP growth in 2021 for the U.S. economy. For a complete look at the financial statements please look at annex 12.

| (USD Mn) | Historical | | | Estimate | | |
|-----------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Revenues: | | | | | | |
| U.S. Domestic Package | 36,747 | 38,153 | 40,317 | 42,522 | 44,217 | 45,936 |
| International Package | 12,149 | 12,484 | 13,224 | 14,203 | 15,175 | 16,018 |
| Supply Chain & Freight | 9,467 | 10,035 | 10,838 | 11,999 | 12,830 | 13,480 |
| Total Revenue | 58,363 | 60,672 | 64,379 | 68,723 | 72,222 | 75,435 |
| COGS | 10,525 | 12,134 | 12,875 | 13,744 | 14,444 | 15,086 |
| SG&A | 2,422 | 2,477 | 2,628 | 2,806 | 2,948 | 3,080 |
| Labor Costs | 31,028 | 32,299 | 34,272 | 36,585 | 38,448 | 40,158 |
| Other operating expenses | 4,636 | 4,743 | 5,033 | 5,372 | 5,646 | 5,897 |
| EBITDA | 9,752 | 9,020 | 9,571 | 10,217 | 10,737 | 11,214 |
| Depreciation/Amortization | 2,084 | 2,222 | 2,230 | 2,259 | 2,303 | 2,358 |
| EBIT | 7,668 | 6,798 | 7,341 | 7,958 | 8,434 | 8,857 |
| Taxes | 2,498 | 2,337 | 2,524 | 2,736 | 2,899 | 3,045 |
| NOPLAT | 5,170 | 4,461 | 4,818 | 5,222 | 5,535 | 5,812 |
| Depreciation/Amortization | 2,084 | 2,222 | 2,230 | 2,259 | 2,303 | 2,358 |
| Operating Cash Flow | 7,254 | 6,683 | 7,047 | 7,481 | 7,837 | 8,170 |
| CAPEX | - 2,379 | - 2,800 | - 2,518 | - 2,687 | - 2,824 | - 2,950 |
| Inv in Working Capital | - 254 | 122 | - 133 | - 156 | - 125 | - 115 |
| Free Cash Flow to the firm | | 4,004 | 4,397 | 4,638 | 4,888 | 5,105 |
| Terminal value | | | | | | 119,804 |

Table 12: Free Cash Flow to the Firm and its components, for the historical year 2015 and the projected 2016-20

6.1.2. WACC-method

6.1.2.1. Cost of Capital

The WACC obtained to discount the FCFE was 6.33% and it was based on the following assumptions:

| Component | Value | Description | Source |
|-----------------------|--------------|--|-------------------|
| Cost of Debt | 3.29% | 10 year bond yield | Reuters |
| Tax Rate | 34% | Average Effective tax rate 2013-15 | UPS's financials |
| MV of Net Debt | \$9,817Mn | Target MV Debt - Cash and Cash Equivalents | UPS's financials |
| Cost of Equity | 6.77% | Risk Free 1.88% 10 year Treasury Gov | U.S. Treasury Gov |
| | | Market Risk 7.25% Historical Average S&P500 | Damodaran |
| | | MRP 5.37% Market Risk - Risk Free | |
| | | Levered Beta 0.91 5yr regression, monthly data | Reuters |
| MV of Equity | \$92,683Mn | Market Capitalization | Reuters |

Table 13: WACC components

6.1.2.2. Equity Valuation

With the previous cash-flow and cost of capital assumptions, we obtain an Enterprise Value of \$107,258Mn and an Equity per share of \$107.91.

| (USD Mn) | | 2016 | 2017 | 2018 | 2019 | 2020 |
|-----------------------------------|--|----------------|--------------|--------------|--------------|----------------|
| Free Cash Flow to the firm | | 4,004 | 4,397 | 4,638 | 4,888 | 5,105 |
| Terminal value | | | | | | 119,804 |
| WACC | | 6.33% | | | | |
| Discounted Cash flow | | 3,766 | 3,889 | 3,859 | 3,825 | 91,920 |
| Entreprise Value | | 107,258 | | | | |
| Non controlling interest | | 21 | | | | |
| Net debt | | 11,604 | | | | |
| Equity value | | 95,633 | | | | |
| Outstanding shares | | 886 | | | | |
| Equity value per share | | 107.91 | | | | |

Table 14: WACC-method Valuation Output – Enterprise Value, Equity Value and Equity value per share

6.1.2.3. Sensitivity Analysis

The WACC and the terminal growth rate are two major inputs of the valuation. Hence, a sensitivity analysis was made to these components, ranging 0.5 p.p.. As a result, price per share varies from \$86.74 to \$141.69, meaning that the estimates are extremely sensitive to the parameters analyzed.

| EV (USD Mn) | | Growth Rate | | | | |
|-----------------------|-------|-------------|---------|----------------|---------|---------|
| | | 1.48% | 1.73% | 1.98% | 2.23% | 2.48% |
| WACC | 5.83% | 109,190 | 114,908 | 121,370 | 128,730 | 137,190 |
| | 6.08% | 103,171 | 108,219 | 113,883 | 120,284 | 127,575 |
| | 6.33% | 97,773 | 102,258 | 107,258 | 112,870 | 119,210 |
| | 6.58% | 92,906 | 96,912 | 101,355 | 106,309 | 111,868 |
| | 6.83% | 88,494 | 92,092 | 96,062 | 100,463 | 105,371 |
| Price per share (USD) | | Growth Rate | | | | |
| | | 1.48% | 1.73% | 1.98% | 2.23% | 2.48% |
| WACC | 5.83% | 110.09 | 116.55 | 123.84 | 132.14 | 141.69 |
| | 6.08% | 103.30 | 109.00 | 115.39 | 122.61 | 130.84 |
| | 6.33% | 97.21 | 102.27 | 107.91 | 114.25 | 121.40 |
| | 6.58% | 91.72 | 96.24 | 101.25 | 106.84 | 113.12 |
| | 6.83% | 86.74 | 90.80 | 95.28 | 100.25 | 105.78 |

Figure 12: Sensitivity analysis to the Terminal Growth rate and WACC

6.1.3. APV Method

To compute the Equity value per share through the APV method, we first need to compute the debt value per year, so that interest tax shields can be computed. In order to have an idea about the change in debt levels, please refer to annex 13, where *Dividends, Stock Repurchase and Debt* are analyzed.

6.1.3.1. Cost of Capital

The Unlevered Cost of Equity obtained to discount the FCFF was 6.48% and it was based on the same assumptions described in 6.1.2.1., with the addition of:

| <i>Component</i> | <i>Value</i> | <i>Description</i> |
|-----------------------|--------------|---|
| <i>Debt Beta</i> | 0 | Assumption |
| <i>Unlevered Beta</i> | 0.82 | Computed with levered beta, debt beta, MV Net Debt, MV Equity, Tax rate |

Table 15: Unlevered cost of equity components

6.1.3.2. Equity Valuation

One must first discount the FCFF by the unlevered cost of capital, compute the annual debt tax shield, including its terminal value, and discount them by the cost of debt, while accounting for the costs of financial distress¹⁷. With such procedure, I obtain an Enterprise Value of \$114,353Mn and Equity value per share of \$115.92.

¹⁷ Computed as explained in section 2.1.1.2., using default probabilities retrieved from Thomson Reuters and CFD of 7.5%. For the terminal value, it was used the 10yr default probability rate of UPS

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|----------------|--------|--------|--------|----------|
| Free Cash Flow to the firm | 4,004 | 4,397 | 4,638 | 4,888 | 5,105 |
| Terminal value | | | | | 115,746 |
| <i>Unlevered Cost of Equity</i> | 6.48% | | | | |
| Unlevered Enterprise Value | 103,583 | | | | |
| Tax Shields | | | | | |
| Total Debt | 14,961 | 15,412 | 15,590 | 15,591 | 15,341 |
| Interest payments | 492 | 507 | 513 | 513 | 505 |
| Interest tax shield | 169 | 174 | 176 | 176 | 174 |
| Terminal Value | | | | | 13,507 |
| <i>Cost of Debt</i> | 3.29% | | | | |
| PV Tax Shield | 12,278 | | | | |
| Costs of Financial Distress | | | | | |
| Default Probability | 0.0% | 0.5% | 1.3% | 2.3% | 4.0% |
| Costs of Financial Distress (7.5%) | - | 1.55 | 4.36 | 8.43 | 15.15 |
| Terminal Value (default prob @ 17.87%) | | | | | 1,625.34 |
| <i>Risk Free</i> | 1.88% | | | | |
| Pv expected bankruptcy | 1,508 | | | | |
| Financing side effects | 10,770 | | | | |
| APV Enterprise Value | 114,353 | | | | |
| Non controlling interest | 21 | | | | |
| Net debt | 11,604 | | | | |
| Equity value | 102,728 | | | | |
| Outstanding shares | 886 | | | | |
| Equity value per share | 115.92 | | | | |

Table 16: APV-method Valuation Output – Enterprise Value, Equity Value and Equity value per share, in USD Millions, except per share data

6.1.4. Relative Valuation

UPS is a very specific company, operating in the three aforementioned segments and being considered the industry leader regarding operating margin and efficiency levels. For these reasons, it is difficult to find the correct peer group. Under a first approach, a group of 7 companies were selected, described in annex 14. In this already selected group, some companies operate in the same segment as UPS, while others operate only on one or two. After computing a first multiple valuation, and achieving a wide range of values, also presented in annex 14, the group was further restricted to 5 companies, 4 of them operate in the same 3 subsegments as UPS, and 1 operates only on the CEP area, which represents 84% of UPS's revenues in 2015. The selected multiples benefit forward and EV-ratios as explained in 2.1.2.. P/E multiple was included to demonstrate how distant it can be from the EV-multiples, misleading the valuation. According to the results, share price should be between \$94.19 and \$103.38, disregarding the P/E, and looking at the median¹⁸.

| Forward multiples | EV/EBIT | EV/ FCFF | P/E |
|-----------------------------|---------|----------|---------|
| FedEx Corporation | 21.32 x | 80.61 x | 15.18 x |
| Deutsche Post (DHL) | 12.40 x | 25.26 x | 13.15 x |
| TNT | 28.76 x | n.a. | 38.56 x |
| Post NL | 6.02 x | 22.24 x | 9.03 x |
| Transforce Inc | 15.19 x | 11.20 x | 13.03 x |
| Median | 15.19 x | 23.75 x | 13.15 x |
| Average | 16.74 x | 34.83 x | 17.79 x |
| Value weighted | 20.16 x | 49.25 x | 18.81 x |
| Price per share (\$) | | | |
| Median | 103.38 | 94.19 | 62.49 |
| Average | 115.28 | 144.25 | 84.53 |
| Value weighted | 141.54 | 209.43 | 89.40 |

Table 17: Multiples Restricted Peer Group

¹⁸ Average can be misleading due to extreme values while value weighted can incorporate too much weight on a specific company, since they have significant different market capitalizations (annex 14)

6.1.5. Summary

The following graph shows a summary of the different valuation methods used in this section as well as two market prices¹⁹. The fair value of UPS seems to be between \$94.19 and \$115.92. In order to achieve our fair value price per share, I decided to use a weighted average, so that 60% is attributed to the WACC-method, 20% to APV, and 10% to each of the selected multiples. The result is a price per share of \$107.69 and an EV of \$107,060Mn.

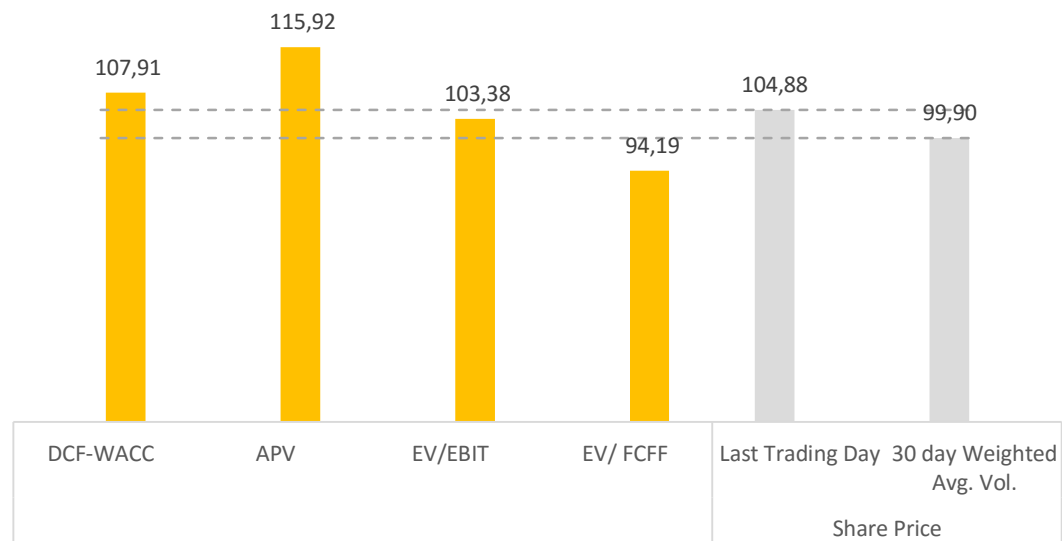


Figure 13: Summary of UPS's Valuation

¹⁹ Closing price of the last trading day before the valuation: 23-Mar-2016, and the 30 day weighted average closing price by volume

6.2. Panalpina World Transport

6.2.1. Cash-flow Projections

6.2.1.1. Revenues

Revenues were estimated taking into account the specific information provided in the company's AR, that is, volume and total revenue in the *air* and *ocean freight* and total revenue in the *logistics* segment. In the first two mentioned segments, it was possible to compute an implicit average historical price per year, leading to better estimates, while in the *logistics* segment, it was only estimated total revenue.

The following graph and table show the estimated revenue values per segment for the explicit period. The volume in the *air freight* segment is estimated to sharply increase in 2016 and stabilize until 2020, assuming a volume growth rate of 6%. The high growth rates in the early estimated years come from management's belief about volume in the perishables sector, which will reduce the dependence on the cyclical business²⁰. Regarding the volume in *ocean freight*, it is estimated to have increasing growth rates, achieving 6% in 2020, mostly due to market growth rate. Panalpina believes that it will be a challenge not to lose market share in this segment, due to the high consolidation trend expected to continue in the future years. Nevertheless, it is also mentioned that the company will increase customer segmentation in this division, leading to stronger players and being able to offer integrated solutions, which will most likely leave this segment profitability unchanged.

The estimated price in both freight divisions deeply depends on the fuel price, which is expected to further decrease in 2016 and gradually increase until 2020. It was assumed that the impact on price is the same for both segments, which leads to equal growth rates regarding the average price.

The logistics division of Panalpina has been estimated to grow at increasing positive rates until 2018 and stabilize thereafter reaching a growth rate of 5% in 2020. This values are mostly based on the company's beliefs regarding the already established trends of distributed manufacturing and mass personalization, deeply related to the high growth of e-commerce, 3D printing technologies and customized products.

²⁰ Moreover, the company acquired in 2015, *Airflo*, Kenya's second largest air freight forwarder specialized in the export of flowers and vegetables, which is expected to increase not only the tonnage but also introduce new routes in Africa northbound

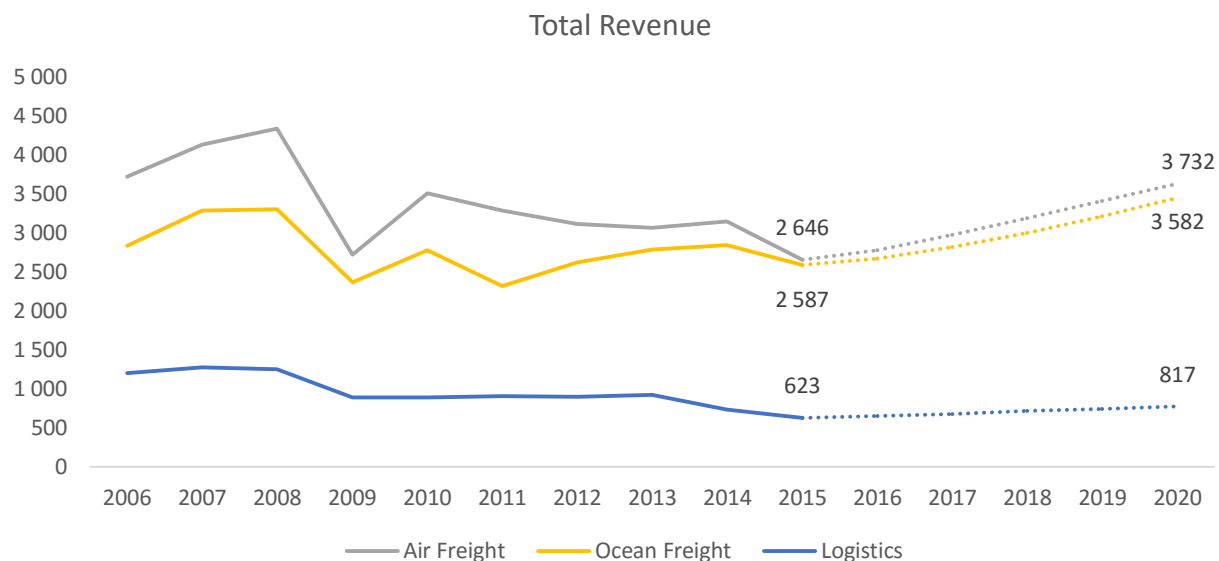


Figure 14: Revenues per segment, for the period 2006-15 (historical) and 2016-20 (projections), in CHF millions

| Revenue Growth | | 2016E | 2017E | 2018E | 2019E | 2020E | CAGR 15-20 |
|----------------------|-----------------------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Air Freight | Volume | 8.0% | 7.0% | 6.0% | 6.0% | 6.0% | 6.6% |
| | Implicit Average price | -2.0% | 0.5% | 1.0% | 1.5% | 1.5% | 0.5% |
| | Total Air Freight Revenue | 5.8% | 7.5% | 7.1% | 7.6% | 7.6% | 7.1% |
| Ocean Freight | Volume | 7.0% | 6.0% | 6.0% | 6.0% | 6.0% | 6.2% |
| | Implicit Average price | -2.0% | 0.5% | 1.0% | 1.5% | 1.5% | 0.5% |
| | Total Ocean Freight Revenue | 4.9% | 6.5% | 7.1% | 7.6% | 7.6% | 6.7% |
| Logistics | Total Logistics Revenue | 5.0% | 6.0% | 7.0% | 5.0% | 5.0% | 5.6% |
| Total Revenue | | 5.3% | 6.9% | 7.1% | 7.3% | 7.3% | 6.8% |

Table 18: Annual Percentage change in Revenues per segment and subsegment, including when possible volume and price changes, for the projected period, 2016-20

As previously explained, revenue estimation is one of the key factors when valuing a company. Please look at annex 15 for this comparison.

6.2.1.2. Operational Costs & Margins

COGS, SG&A, Labor and Other Operating Expenses were estimated to change by the percentage of revenues. After analyzing the historical percentage of these costs in revenues, it was assumed

the average percentage 2013-15, implying that such costs grow at the same rate as revenues²¹. For *COGS*, *SG&A*, *Labor* and *Other Operating Expenses* the average percentage used was 75.6%, 6.3%, 14.7% and 0.4%, respectively.

Depreciation and *Amortization* costs were estimated individually. *Depreciation* was assumed to be the average percentage of Net PPE 2011-15, that is 28.8%, while *Amortization* was predicted by the average percentage of Net Intangible Assets 2011-15, assuming 36.6%.

Profitability margins are slowly increasing, mostly due to the change in labor costs, attaining values between 1.8-2.4% for *operating margin* and 2.5-3.1% for *EBITDA*. In 2015, both margins were higher than the estimated ones, which is justifiable considering the significant decrease in costs, specifically in *COGS* that decreased 14%.

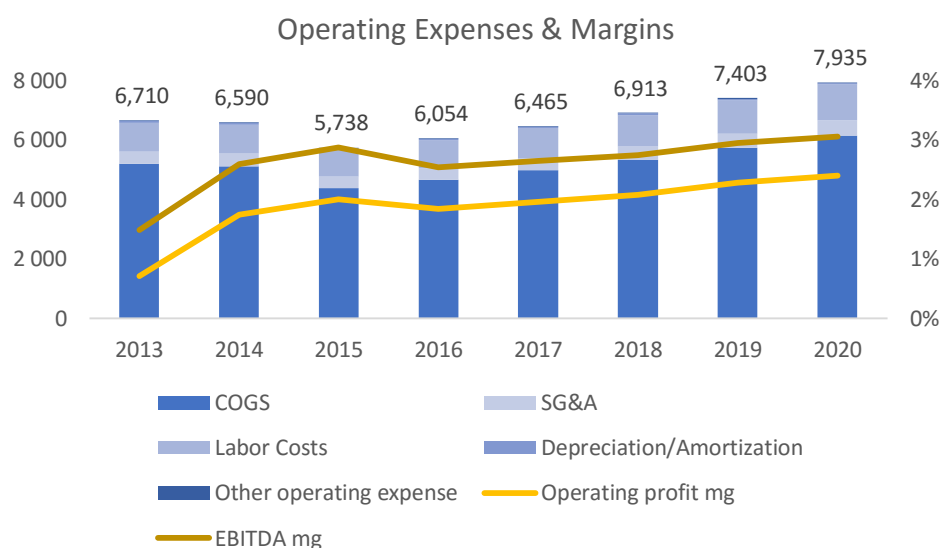


Figure 15: Operational Costs in CHF millions, EBITDA and Operating Profit margins, for the historical period 2013-15 and the projected period 2016-20

6.2.1.3. Capital Expenditures & Net Working Capital

Please refer to annex 16 for detail on the computation of these items.

²¹ The exception to this procedure was the computation of *COGS*, which was assumed to be the average percentage of revenues from 2014-15, since it best represents the future expected trend according to the management. Also *Labor* costs were assumed to gradually decrease to the 2013-15 average assumed in 2020 due to the low flexibility around this parameter

6.2.1.4. Free Cash Flow to the Firm

Based on the previous projections, and assuming a tax rate of approximately 25%, average effective tax rate 2014-15, it was computed the FCFF as presented in table 19. The growth rate assumed in the terminal value, 1.80%, is the IMF's estimate of GDP growth in 2021 for Switzerland. For a complete look at the financial statements please look at annex 17.

| (CHF Mn) | Historical | | Estimate | | | |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Revenue: | | | | | | |
| Air Freight | 2,646 | 2,800 | 3,011 | 3,224 | 3,468 | 3,732 |
| Ocean Freight | 2,587 | 2,713 | 2,890 | 3,094 | 3,329 | 3,582 |
| Logistics | 623 | 654 | 693 | 741 | 778 | 817 |
| Total Revenue | 5,855 | 6,167 | 6,594 | 7,059 | 7,576 | 8,131 |
| COGS | 4,382 | 4,662 | 4,985 | 5,336 | 5,727 | 6,146 |
| SG&A | 386 | 389 | 416 | 445 | 478 | 513 |
| Labor Costs | 896 | 937 | 996 | 1,059 | 1,121 | 1,195 |
| Other operating expenses | 23 | 22 | 23 | 25 | 27 | 29 |
| EBITDA | 168 | 157 | 174 | 194 | 223 | 248 |
| Depreciation/Amortization | 51 | 44 | 45 | 47 | 50 | 53 |
| EBIT | 117 | 113 | 129 | 146 | 173 | 195 |
| Taxes | 29 | 28 | 32 | 37 | 43 | 49 |
| NOPLAT | 88 | 85 | 97 | 110 | 130 | 147 |
| Depreciation/Amortization | 51 | 44 | 45 | 47 | 50 | 53 |
| Operating Cash Flow | 139 | 129 | 142 | 157 | 180 | 199 |
| CAPEX | - 17 | - 47 | - 50 | - 54 | - 58 | - 62 |
| Inv in Working Capital | 25 | - 33 | - 13 | - 15 | - 18 | - 18 |
| Free Cash Flow to the firm (CHF) | 148 | 49 | 78 | 89 | 104 | 119 |
| Terminal Value | | | | | | 2,143 |

Table 19: Panalpina's Free Cash Flow to the firm and its components, for the historical year 2015 and the projected period 2016-20

6.2.2. WACC-method

In this dissertation, it was opted to use method B as described in section 2.2.5., implying the forecast of exchange rates. This step was performed under the theory *Uncovered Interest Rate Parity*²², through the following formula:

$$F_t = S_t * \left[\frac{(1 + r_{CHF,t})}{(1 + r_{USD,t})} \right]^t$$

²² This theory states that, under efficient markets, the difference in interest rates between two countries is equal to the expected change in exchange rates between its currencies

I estimate that the Swiss Franc will strengthen against the U.S. dollar, reaching an exchange rate USD1.1701/CHF by 2020. This estimates are close to the futures contract available in the market, as observable in figure 27.

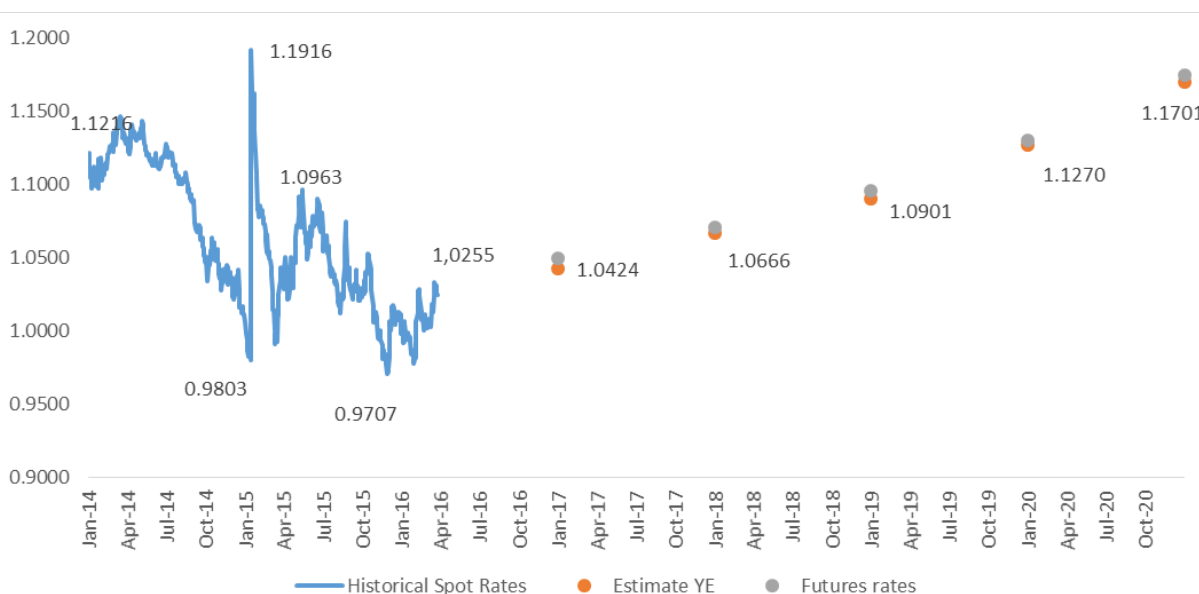


Figure 16: USD/CHF exchange rate for the historical 01-Jan-2014 to 23-Mar-2016 and the estimated 2016-20, as the future contracts for the same period

6.2.2.1. Cost of Capital

Method B requires that the cost of capital used corresponds to the U.S. one. Hence, the WACC obtained to discount the FCFE was 7.46%²³, as detailed in table 20:

| Component | Value | Description | Source |
|-----------------------|----------|-------------------------------------|---|
| Cost of Debt | 1.14% | | RBC Capital Markets |
| Tax Rate | 25% | Average Effective tax rate 2014-15 | Panalpina's financials |
| MV of Net Debt | -£392Mn | MV Debt - Cash and Cash Equivalents | Panalpina's financials |
| Cost of Equity | 7.46% | Risk Free | 1.88% 10 year Treasury Gov U.S. Treasury Gov |
| | | Market Risk | 7.25% Historical Average S&P500 Damodaran |
| | | MRP | 5.37% Market Risk - Risk Free |
| | | Levered Beta | 1.04 5yr regression, monthly data Reuters |
| MV of Equity | £2,500Mn | Market Capitalization | Reuters |

Table 20: WACC components

²³ Assumed that the proportion of Net Debt is 0%, since this value is negative and not significant. Hence, the WACC equals the cost of equity, 7.46%

6.2.2.2. Equity Valuation

With the previous cash-flow and cost of capital assumptions, I obtain an Enterprise Value of \$2,132Mn and an Equity per share of \$106.25. For detail on method A, please refer to annex 18.

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|-------------------------------------|---------------|--------|--------|--------|--------|
| Free Cash Flow to the firm (CHF) | 49 | 78 | 89 | 104 | 119 |
| Terminal Value | | | | | 2,143 |
| Future rates | 1.0424 | 1.0666 | 1.0901 | 1.1270 | 1.1701 |
| Free Cash Flow to the firm (USD) | 51 | 84 | 97 | 117 | 2,647 |
| WACC | 7.46% | | | | |
| Enterprise Value | 2,132 | | | | |
| Non controlling interest | 12 | | | | |
| Net debt | - | 402 | | | |
| Equity value | 2,522 | | | | |
| Outstanding shares | 24 | | | | |
| Equity value per share (USD) | 106.25 | | | | |

Table 21: WACC-method Valuation Output – Enterprise Value, Equity Value and Equity value per share

6.2.2.3. Sensitivity Analysis

As in UPS, a sensitivity analysis was performed to the WACC and the terminal growth rate, with a range of 0.5 p.p.. As a result, price per share varies from \$93.21 to \$124.87.

| EV (USD Mn) | | Growth Rate | | | | |
|-------------|-------|-------------|-------|--------------|-------|-------|
| | | 1.30% | 1.55% | 1.80% | 2.05% | 2.30% |
| WACC | 6.96% | 2,170 | 2,257 | 2,353 | 2,458 | 2,574 |
| | 7.21% | 2,072 | 2,151 | 2,237 | 2,332 | 2,436 |
| | 7.46% | 1,982 | 2,054 | 2,132 | 2,217 | 2,311 |
| | 7.71% | 1,899 | 1,965 | 2,036 | 2,113 | 2,198 |
| | 7.96% | 1,822 | 1,882 | 1,947 | 2,018 | 2,094 |

| Price per share (USD) | | Growth Rate | | | | |
|-----------------------|-------|-------------|--------|---------------|--------|--------|
| | | 1.30% | 1.55% | 1.80% | 2.05% | 2.30% |
| WACC | 6.96% | 107.87 | 111.53 | 115.55 | 119.97 | 124.87 |
| | 7.21% | 103.74 | 107.06 | 110.69 | 114.66 | 119.05 |
| | 7.46% | 99.94 | 102.96 | 106.25 | 109.85 | 113.79 |
| | 7.71% | 96.44 | 99.20 | 102.20 | 105.46 | 109.02 |
| | 7.96% | 93.21 | 95.74 | 98.47 | 101.44 | 104.67 |

Figure 17: Sensitivity analysis to the Terminal Growth rate and WACC

6.2.4. Relative Valuation

Once again, the choice for the peer group is difficult considering the different segments. Nevertheless, I first proposed a group of 7 companies that operate in the same segment as Panalpina and are subject to the same conditions, described in annex 19. However, under this first selection, two companies, DHL and TNT, strongly operate in the CEP segment²⁴, and for this reason were excluded from the restricted group. The selected multiples correspond to the ones presented in UPS's relative valuation, and are also based on forward ratios. Under the median values, I obtained a range of \$93.46-113.96 per share. Out of these indicative market prices, I tend to disregard the Price-Earnings-ratio, since it is more susceptible to manipulation and accounting tricks. For a complete description of the selected peer group and multiples, please consider annex 19.

| Forward multiples | EV/EBIT | EV/ FCFF | P/E |
|-----------------------------|---------|----------|---------|
| Kuehne+Nagel | 16.52 x | 21.08 x | 24.70 x |
| Kerry Logistics Network Ltd | 10.80 x | n.a. | 15.36 x |
| AP Moeller Maersk | 28.76 x | 71.96 x | 18.34 x |
| DSV | 20.76 x | 148.20 x | 24.67 x |
| Expeditors International | 11.20 x | 16.33 x | 25.50 x |
| Median | 16.52 x | 46.52 x | 24.67 x |
| Average | 17.61 x | 64.39 x | 21.71 x |
| Value weighted | 17.26 x | 49.41 x | 23.48 x |
| Price per share (\$) | | | |
| Median | 97.30 | 113.96 | 93.46 |
| Average | 102.61 | 151.43 | 82.25 |
| Value weighted | 100.91 | 120.02 | 88.93 |

Table 22: Multiples Restricted Peer Group

²⁴ CEP segment was responsible for 51.80% and 93.25% of 2015 Revenues for DHL and TNT Express, respectively

6.2.5. Summary

The following graph shows a summary of the different valuation methods used in this section as well as two market prices²⁵. The fair value of Panalpina seems to be between \$93.46 and \$113.96. To achieve our fair value price per share, I decided to use a weighted average, so that 60% is attributed to the WACC-method B, 20% to method A, and 10% to each of the selected multiples. The result is a price per share of \$106.20 and an EV of \$2,131Mn.

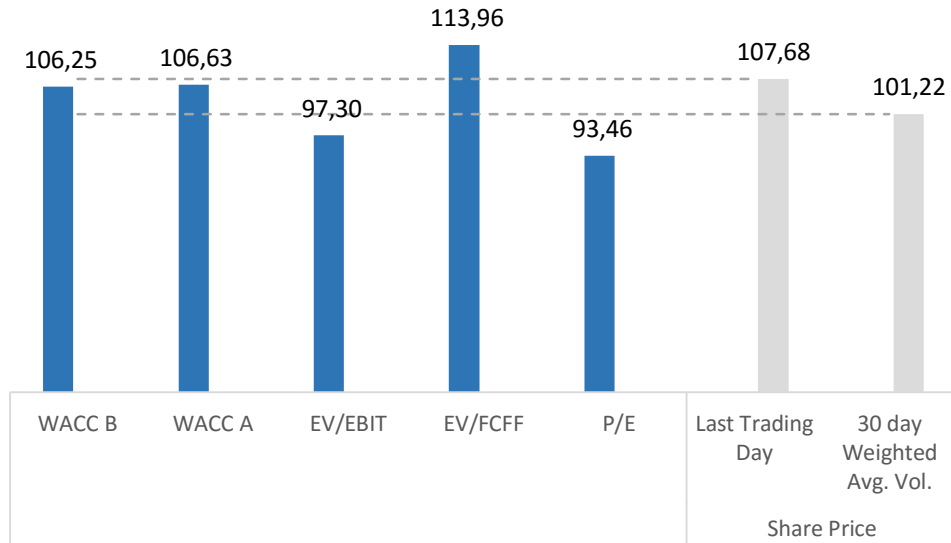


Figure 18: Summary of Panalpina's Valuation

²⁵ Closing price of the last trading day before the valuation: 23-Mar-2016, and the 30 day weighted average closing price by volume in USD

6.3. Valuation of the Merged Entity

6.3.1. No synergies

Under this section, I will assume the value of the merged entity is simply the sum of the two individual values, as if no external or internal forces impact the result. Hence, the Enterprise Value of the *Merged Entity* is \$109,194Mn and its Equity Value reaches \$97,959Mn.

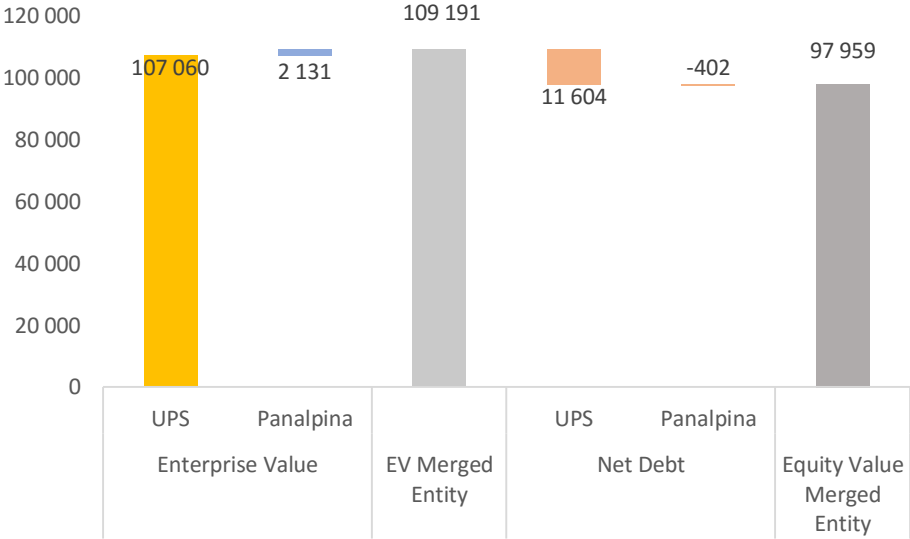


Figure 19: Valuation of the merged company with no synergies

6.3.2. Synergy Valuation

There are specific factors between UPS and Panalpina that allow the companies to be more than the sum of its parts. In fact, I believe that both operational and financial synergies can be found in this acquisition. The methodology used to compute these synergies was based on academic literature, section 2.2.3., and on recent transactions that occurred in the market²⁶, when there is enough detail to understand the synergy valuation. I assume that it will take three years to realize the full synergies, incurring into integration costs during that period.

²⁶ Out of the selected deals, the most relevant ones are the following transactions (bidder-target): DSV-Uti Worldwide; XPO Logistics-Conway; UPS-Coyote; Kuehne+Nagel-Retrans; XPO-Norbert Dentressangle; Radiant Logistics-Wheels Group. For the complete information please look at Annex 20

6.3.2.1. Operating Synergies

6.3.2.1.1. Revenue Synergies

As explained in section 5 one major advantage of combining these two companies is the access to better cross sale opportunities by being able to offer an integrated approach, which is extremely valued by customers in their supply chain area. Hence, I believe volume will increase significantly, as customers will centralize their operations in the new, stronger company and decrease the use of several companies. This reasoning is only significant for the FF&L, since the CEP segments offered by UPS will not suffer from this acquisition.

With this, the total FF&L, which includes the Supply Chain segment of UPS and all Panalpina's segments, will have enhanced revenues. Specifically, I assumed that revenues will increase by 0.3% in 2016, 0.4% in 2017 and 0.5% from 2018 onwards. This represents an increase of approximately \$360Mn over the period 2016-20.

The increase in revenues is small but representative, and indicates a conservative approach to the real number. Revenue synergies are the ones that management most often overestimates and according to academic literatures are the most difficult to realize. Hence, I present a conservative approach regarding this topic.

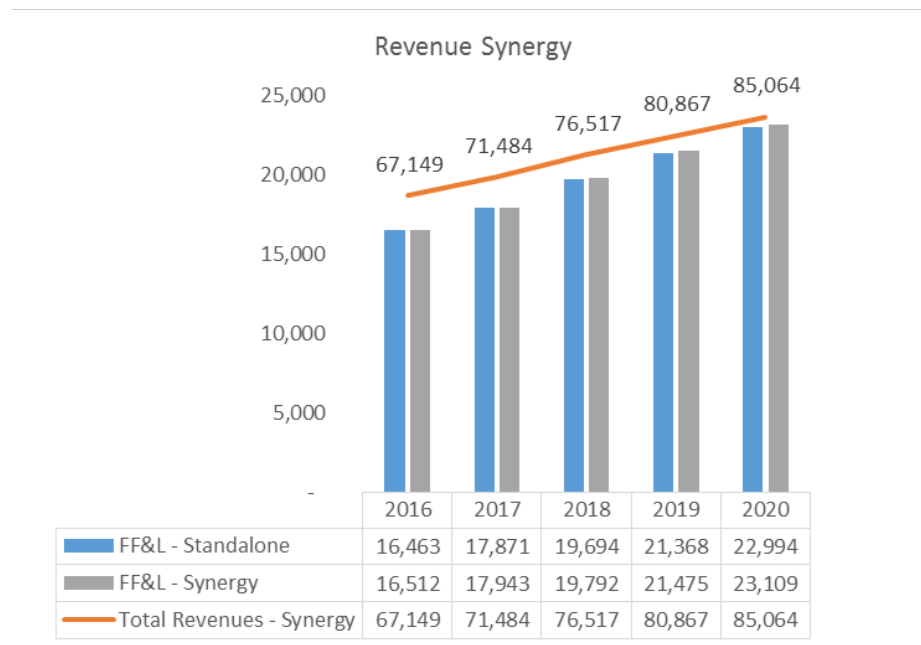


Figure 20: Revenue increase in the FF&L segment, and Total Revenues, in USD million for the projected 2016-20

Since revenues increase, operating expenses and other items estimated as a percentage of revenues shall increase as well. In fact, the impact on sales led to an extra cost of \$152, 18, 137, 25Mn²⁷ in *COGS*, *SG&A*, *Labor Costs* and *other operational expenses*, respectively. Additionally, *capex* also increases, since they were estimated based on revenues, in \$13Mn over the same period²⁸. *NWC* is also modified by the revenue synergy, increasing by \$65Mn.

By performing a DCF-WACC valuation, the value of the synergy can be materialized resulting in \$110Mn.

6.3.2.1.2. Cost Synergies

UPS has a leading operating margin in the industry, based on the constant optimization and automation of its network, which boosts its operational efficiency and adds value. Panalpina is engaged in a complex restructuring plan, *Operations Transformation Program*, whose objective is to increase productivity, optimize costs and generate solid FCFF. It seems that there is the structure and the plan to optimize Panalpina, however the company lacks the ability to execute it. The emergence of UPS may solve this issue, while undertaking the OTP plan and use their best knowledge to optimize Panalpina's costs by being a key leader in the industry. Moreover, the combination of these two companies will result in a higher bargaining power, which specifically applies to *COGS* and *SG&A*. In addition, overlaps in labor positions and the introduction of more automation processes in the target company, will reduce costs with labor.

The following table presents the estimated cost synergy per item²⁹. As observable, the complete synergy effect will occur in 2018, year after which the synergy rates stabilize, assuming that some costs are not possible to immediately change due to contract obligations. *COGS* and *Labor costs* are estimated to decrease by small amounts, 0.05% and 0.10%, respectively, while *SG&A* is estimated to decrease by 1.5% in the first year. Other operating expenses do not reflect any synergy, since it is not clear what they represent, and one should not make inappropriate guesses.

²⁷ Present Value of the total expenses for the explicit period 2016-20

²⁸ CAPEX is not obliged to increase in such situation, but it was recomputed it in order to be consistent with the estimation method and for companies not want to decrease their CAPEX-revenue ratio. The increase in CAPEX directly affects the value of depreciation/amortization which increases \$2Mn over the period

²⁹ The stand alone cost values represent the costs after the revenue synergy, so that the effect of the cost synergy is not overestimated. Due to the size difference between the companies, in order not to overstate the value created by the cost synergy, it was decided to apply the cost reduction only on the proportion represented by the FF&L segment on total revenues of UPS, dependent on each estimated year

These cost reduction represents savings in the amount of \$98Mn, in present value terms, over the period 2016-20. The decrease in costs affect the working capital, which reflects a need to further invest on the same around \$5Mn. As a whole, the cost synergy yields a value of \$838Mn for the resulting company.

| Cost Synergy | | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------|-------------|--------|--------|--------|--------|--------|
| COGS | Stand Alone | 17,014 | 18,222 | 19,602 | 20,943 | 22,327 |
| | decrease | -0.05% | -0.10% | -0.15% | -0.15% | -0.15% |
| | Synergy | 17,010 | 18,214 | 19,590 | 20,929 | 22,312 |
| SG&A | Stand Alone | 2,885 | 3,076 | 3,296 | 3,492 | 3,686 |
| | decrease | -1.50% | -2.00% | -2.50% | -2.50% | -2.50% |
| | Synergy | 2,873 | 3,058 | 3,272 | 3,466 | 3,657 |
| Labor Costs | Stand Alone | 33,276 | 35,334 | 37,739 | 39,711 | 41,556 |
| | decrease | -0.10% | -0.15% | -0.25% | -0.25% | -0.25% |
| | Synergy | 33,288 | 35,352 | 37,758 | 39,732 | 41,577 |
| Other Op. Expenses | Stand Alone | 4,769 | 5,063 | 5,406 | 5,684 | 5,939 |
| | decrease | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | Synergy | 4,769 | 5,063 | 5,406 | 5,684 | 5,939 |

Table 23: Cost Synergy – Absolut and Percentage Decrease for the projected 2016-20

6.3.2.1.3. EBITDA Margin

Both the mentioned synergies change the EBITDA margin, achieving a difference 7 p.p. in the last estimated year. The small changes in the EBITDA margin reflect the conservative approach.

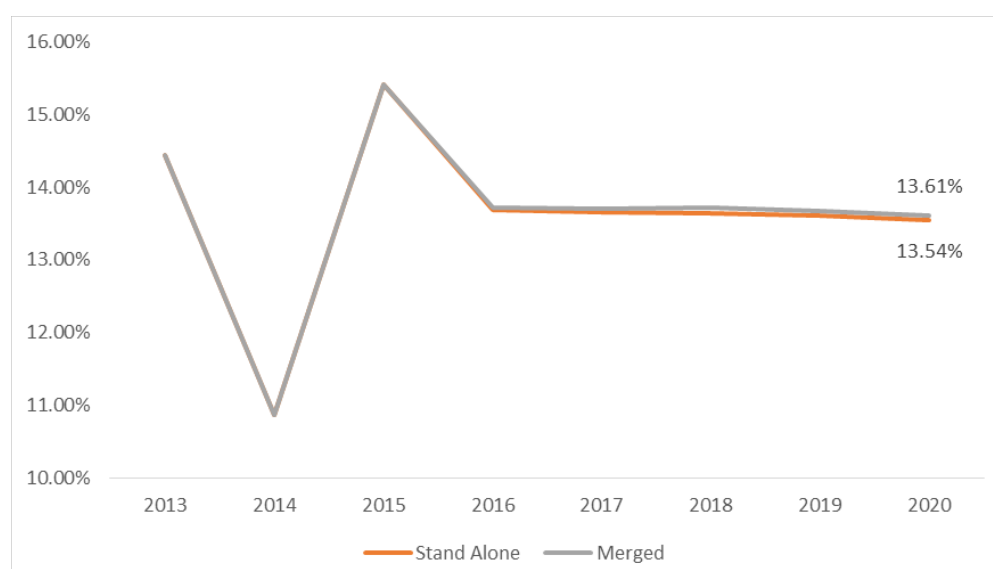


Figure 21: Comparison of the EBITDA margin of the merged entity with the stand alone companies from the historical 2013-15 to the projected 2016-20

6.3.2.2. Financial Synergies

As explained in section 2.2.3., most financial synergies come from the cash slack, debt capacity³⁰ and tax considerations. The first potential synergy, which should create value when one company has high levels of excess cash but limited opportunities while the other has low cash levels but high opportunities, is assumed not to create value for the resulting company since both companies have the necessary cash levels for their investments levels. Debt capacity will be one synergy driver, taking advantage from the non-optimal capital structure of Panalpina, and will be detailed below. At last, I present a tax dissynergy assuming an extremely conservative approach to the valuation.

6.3.2.2.1. Tax Dissynergy

Switzerland benefits from a low corporate income tax (CIT) rate of 8.5% as base rate, but with effective income tax rates varying between 12-24%, while U.S. has a CIT of 35%, also dependent on specific situations (Deloitte, 2015). Panalpina and UPS, having a significant number of operations occurring outside their base country, present an effective tax rate of 25% and 34%, respectively. In order to assume the most conservative approach regarding the taxation, it was assumed that, after the integration, the Swiss-based company will change their taxation system to the U.S., hence it should pay the 34%. As one can expect this greatly creates a tax dissynergy for the resulting company³¹. The tax dissynergy is estimated to decrease the value of the company in \$1,249Mn³². Nevertheless, it is important to bear in mind that this is an extremely conservative approach.

6.3.2.2.2. Debt Capacity

Debt capacity as a potential synergy can surge from either two components: 1) companies are not in their optimal capital structure and one has better access to capital markets; 2) companies operate in different businesses and their cash-flows do not correlate allowing them to have a stronger ability to increase debt, representing safer borrowers.

Under our proposed transaction, the second argument is not valid since companies clearly operate in the same business and are subject to the same market conditions. However, the first

³⁰ Diversification is being included in the debt capacity synergy

³¹ It is estimated that taxes will increase \$64Mn, under the 2016-20 period, compared to the no-synergy-scenario

³² In order to correctly account for the value creation/destruction by the synergies, the tax effect was the first to be computed, followed by revenues, costs, and at last, the financial debt synergy

term is extremely interesting given Panalpina's capital structure characteristics³³. As observable in table 9 in section 4.2.4., the Debt-to-Equity ratio of Panalpina, 0%, is considerably lower than the industry median, 8%. I believe that the easy access of UPS to capital markets and to debt issue, will allow Panalpina to increase the proportion of debt to 8.8%, close to the industry median, implying an issue of \$650Mn, which leads to a net debt of \$248Mn.

This increase in debt leads to changes in the capital structure of the company as a whole. In fact, the WACC, which under the no-synergy-scenario was 6.39%, changes to 6.34%, since the cheap component, debt, receives a higher proportion. This results in a value creation of \$1,283Mn.

6.3.2.3. Integration costs

In order for the process to occur there are certain costs which will occur before, during and after the transaction. For dissertation purposes, I will assume that there will be a transaction fee, charged by the advisors involved in the transaction, 1%, which will be charged twice, assuming that each company has its own advisor.

Moreover, there are some restructuring costs under which the merged entity incurs in order to achieve the desired synergies³⁴. Apart from these and also extremely important are the culture costs³⁵. Other costs include fees with lawyers and consultancy companies.

This restructuring costs were assumed to occur until 2018, year in which full synergies are realized. These costs were estimated as a percentage of the target company EV³⁶ and the total value ascends to \$143Mn.

³³ UPS is assumed to already be in its optimal capital structure

³⁴ Some restructuring costs include: compensation benefits to contract termination, renegotiation costs with suppliers, communication costs, integrated information systems, among others

³⁵ Company culture should be given the right importance for two main reasons: a) employees may not understand the acquisition and if not engaged will not work for the desired results, and b) corporate culture between the two companies may be significantly different

³⁶ 2%, 1.5%, 1%, for 2016-18, respectively

6.3.2.4. Attributed Synergies

As explained in 2.2.3., it is important to separate and attribute each synergy to the company that contributes more to the same. Apart from the *Revenue Synergy* and *Integration Costs*, which were equally attributed, the remaining synergies were mostly assigned to UPS³⁷.

| Attributed Synergy to Company | | |
|-------------------------------|------------|------------|
| | UPS | Panalpina |
| Tax Dissynergy | 100% | 0% |
| Revenue Synergy | 50% | 50% |
| Cost Synergy | 60% | 40% |
| Financial Synergy | 70% | 30% |
| Integration Costs | 50% | 50% |
| Net Synergy | 135 | 704 |

Table 24: Synergies' distribution to each company, Net synergy in USD million

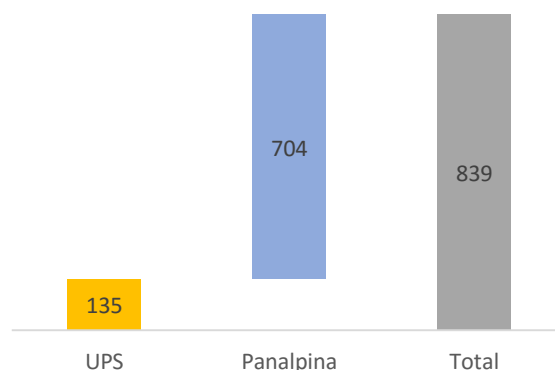


Figure 22: Synergy value distributed between companies

6.3.3. Summary

As observable in figure 34, cost synergy is responsible for 85% of Total Synergy, with taxes representing a negative proportion of -127%, revenues 11% and financial synergies 131%. The total value of the synergy is \$982Mn, while the net synergy achieves \$839Mn.

³⁷Tax dissynergy was completely assigned to UPS due to the tax rate change, while the value of the financial synergy was assumed to be 70% dependent on UPS, since this company is the one with better access to capital markets. The majority of the cost synergy, 60%, was also attributed to UPS due to its above average margins and efficiency ratio

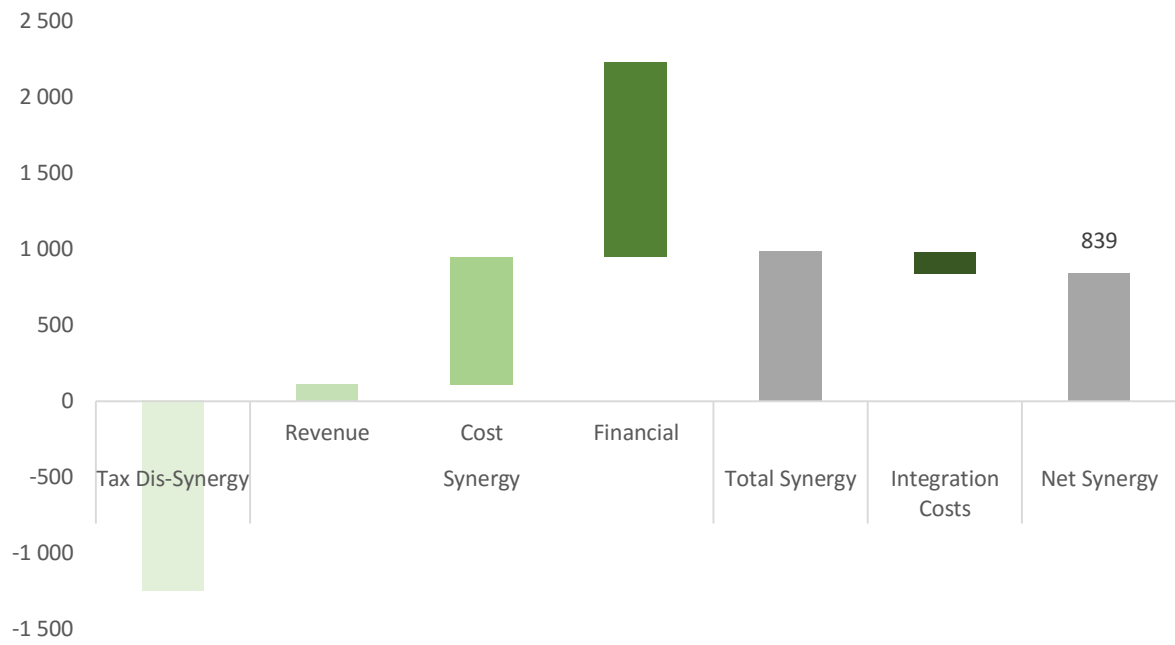


Figure 23: Breakdown of synergy created by the merged company

7. The Transaction

7.1. Deal Price & Structure

Setting the price for a deal is never an easy task. However, there are certain boundaries which are easy to understand, such as the minimum and the maximum bid prices. Under the Efficient Market Hypothesis³⁸, the minimum bid price should be the stock's price of the last trading day, or a weighted average of the last 30 days by volume. In a business point of view, the maximum price should be the one that incorporates all the synergies estimated by the transaction and the estimated value of the target company, so that the bidder does not lose value with the transaction.

Figure 35 displays a range of possible bid values. The minimum price corresponds to the closing price of the last trading day, while the maximum includes all the synergies. In between I propose 3 different prices, which were chosen taking into account the median of the premiums in the selected deals (annex 20) as well as different percentage of the synergies.

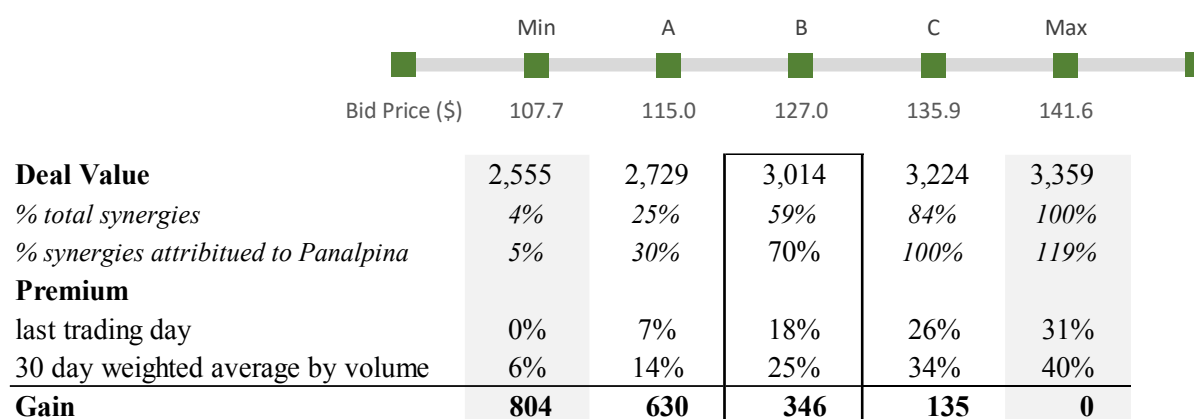


Figure 24: Bid price analysis, including the percentage of synergies paid, the premium and the gain for UPS

In order to protect the shareholders of UPS, I decided that it is more correct to base the bid price on its attributed synergies, while still presenting an interesting premium to the shareholders. Hence, I suggest a bid price of \$127.00, option B, corresponding to €123.84, converting at the exchange rate used under the valuation. With this, the transaction is expected to create a gain of

³⁸ This theory implies that stock market is efficient, incorporating all relevant available public information about an asset, hence, stocks trade at their fair value

\$346Mn³⁹. These premiums are below recent transactions which occurred in the market, observable in the following figure and graph⁴⁰.

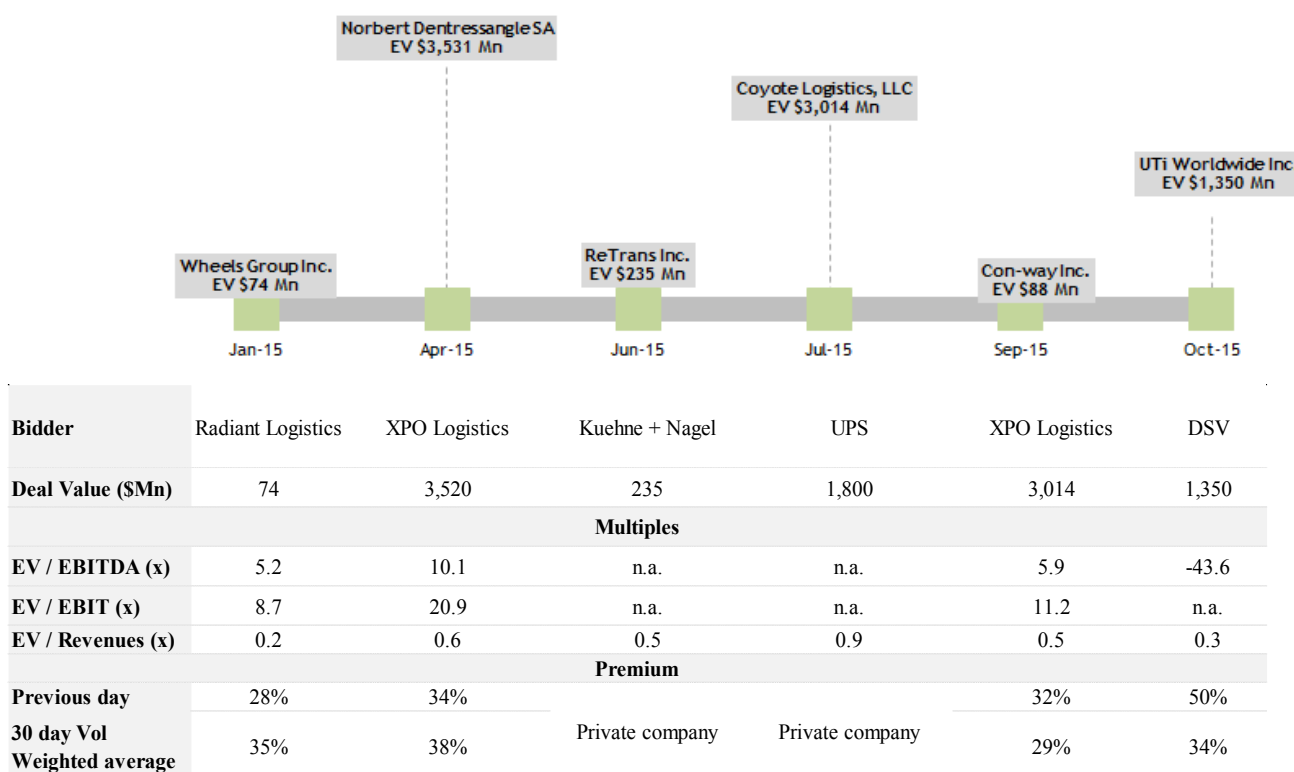


Figure 25: Selected M&A transactions, and respective description: target, bidder, deal value, multiples, premium

Source: MergerMarket

| Transaction Multiples | Market values | UPS - Panalpina |
|--------------------------------|---------------|-----------------|
| EV/EBITDA | 7.63x | 13.00x |
| EV/EBIT | 11.57x | 18.67x |
| EV/Revenues | 0.57x | 0.37x |
| Last trading day | 32% | 18% |
| 30 day volume weighted average | 34% | 25% |

Table 25: Comparison between transaction multiples and premium

Source: MergerMarket

³⁹ Computed as: estimated stand-alone Equity Value of the target + Synergies - price paid

⁴⁰ In this section I only present the most important deals but please refer to the whole selection in annex 20, which was used to compute the multiples on table 33

The transaction should be an all-cash deal where UPS acquires 100% of the Equity Value of Panalpina by \$3,014Mn or F2,939Mn. This method of payment is preferred, enabling the company to send a confident message to the market, while using 50% of its *Cash and Cash equivalents* in 2015 and its *short term investments* to finance the deal.

The transaction shall be presented as a tender offer to the company stockholders, entailing a special communication with the strongest shareholder of the company, Ernst Göhner Stiftung, and the board.

7.2. Form of Integration

As occurred with Coyote's acquisition, I suggest that Panalpina operates as a subsidiary of UPS, implying that the current significant management is retained, managing the day-to-day operations, but the major strategic issues will depend upon UPS's board. Moreover, UPS shall exchange their best knowledge and implement its efficient, below average cost structure. Nevertheless, Panalpina shall be recognized as a brand of the UPS group by clients, suppliers and other stakeholders, and should be seen as the already highly reputed company who has a stronger and highly credible organization to back its operations.

7.3. Major Risks

7.3.1. Shareholder Risk

Since the transaction is an all-cash deal, it is known that the bidder shareholders take on more risk than a stock deal. One indicative measure to understand the risk that is being taken by the shareholders of the bidder company is the Shareholder Value at Risk (SVAR) proposed by (Rappaport & Sirower, 1998)⁴¹. For the analyzed deal, this measure is 0.5%, a considerably low number mainly explained by the difference in the size of the bidder and the target. Hence, I expect the transaction to create value while not putting much at risk.

⁴¹ The formula is $SVAR = \text{Premium-Offered} / \text{Market-Capitalization of the Acquirer}$

7.3.2. Regulatory Risk

Previous deals in the sector have been rejected by European Commission, such as the \$6.77Bn bid for TNT Express by UPS in October 2012⁴², hence, this is a major concern in M&A in the T&L industry. Nevertheless, I am confident that this deal will occur because: Panalpina is not as big as the rejected company; there are several players operating in the industry after the transaction; most recent transactions of the FF&L have been accepted.

7.3.3. Other Risks

Since the target has a shareholder who detains 45.9% of the company, there is a risk that the transaction may not be successful, if this shareholder imposes great difficulties. For this reason, it is highly recommended for UPS to keep an open dialogue while engaging this stockholder, bearing in mind that it should actively listen and understand some potential demands.

Major operational and legal risks should be analyzed in the DD phase, so that the company knows exactly what is buying and if it is possible to extract all the estimated benefits.

7.4. Alternatives

As important as analyzing the selected target and bidder, it is also important to know if the bidder has any potential competition and if there is another target company as a BATNA alternative.

7.4.1. Other Bidder

Overall, Panalpina is a highly interesting player for both strategic firms, already operating in the industry, and financial players, such as Private Equity. Under the first group, major reasons rely on the consolidation trend present in the industry and offers may appear from players who have not recently acquired in this subsegment, such as DHL. PE groups may also have a special interest in the target since it has a low proportion of debt, and some players may be interested in optimizing its capital structure with an LBO.

⁴² EU expressed concerns with the size of TNT Express and the few players that would operate in the industry after the acquisition in certain countries

7.4.2. Other Target

If the deal cannot be made due to shareholder disagreements but UPS is confident on the regulatory conditions, UPS may look to Kuehne+Nagel, bearing in mind that the deal would be larger since company is bigger. Other potential target could also be Expeditors.

8. Conclusion

This dissertation intended to study the potential acquisition of Panalpina by UPS, explaining the industry and the companies, while discussing cross-border valuation technicalities and specific M&A topics.

Nevertheless, being this an academic thesis under a financial basis, there are some limitations. In fact, some legal issues were not deeply extended and studied and should be further examined, including the taxation agreement between both countries and the double taxation system. Under a prudential and conservative approach, I presented the worst case scenario: tax rate equals the U.S. rate.

The industry is in clear consolidation and the moment is right for UPS to acquire a forwarding freight company. Panalpina surges as the strongest possibility, being a top 5 player in the segment but yet not too big to incur into any regulatory constraints.

The transaction is expected to create net synergies of \$839Mn, resulting from both operational and financial synergies. Hence, I propose a bid price of \$127.00 or €123.84, implying a total deal value of \$3,014Mn or €2,939Mn, which translates into a premium of 25% over the 30-day volume weighted average closing price. The expected gain for UPS is \$346Mn.

9. Annexes

9.1. Annex 1: Industry Concentration

The top 4 players in the Air and Ocean Freight segments are the same, however the overall market, is extremely competitive with several player competing for a significant position.

| AIR FREIGHT | | | OCEAN FREIGHT | | |
|-------------|--------------|------------------------------|---------------|--------------|------------------------------|
| Rank | Company | Volume (Thousands tonnes) | Rank | Company | Volume (Thousands tonnes) |
| 1 | DHL | 2276 | 1 | Kuehne+Nagel | 3820 |
| 2 | Kuehne+Nagel | 1194 | 2 | DHL | 2932 |
| 3 | DB Schenker | 1112 | 3 | DB Schenker | 1983 |
| 4 | Panalpina | 858 | 4 | Panalpina | 1607 |

Table 26: Top 4 players by Volume in Air and Ocean Freight segment

Source: DHL, Annual Report 2015, data refers to 2014

The logistics segment presents a highly dispersed market share, with several players competing in the market and holding small market shares. In fact, the biggest player achieves 7.4% of the market while the top 10 companies represent 20% of the market.

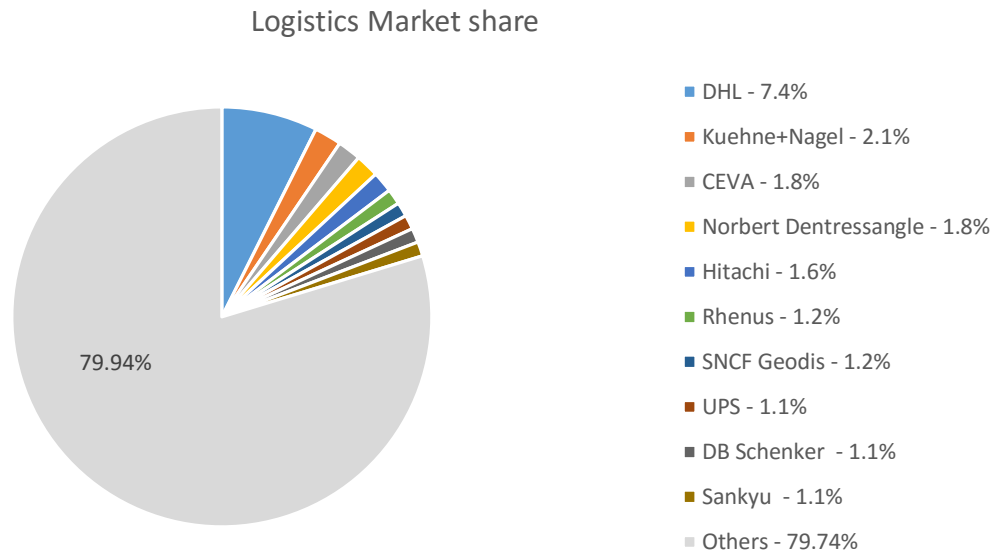


Figure 26: Logistics Market share by revenues

Source: DHL, Annual Report 2015, data refers to 2014

In the CEP segment, the market is clearly dominated by DHL, FedEx and UPS, representing 84%, while TNT Express represents 5%.

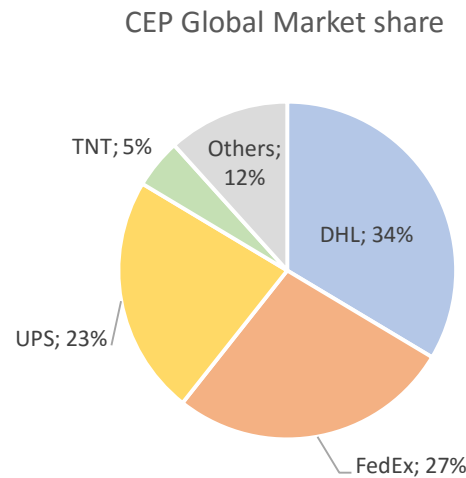


Figure 27: CEP Market share by revenues

Source: DHL, Annual Report 2015, data refers to 2014

9.2. Annex 2: M&A activity in the T&L industry

In 2015, the activity in the T&L industry inverted the downward trend present since 2011, both in value and the number of deals. The average deal value increased in the last year, caused by the increase in megadeals that occurred over the last year. Moreover, cross-board transactions seem to have increased with the large players in the industry continuing to expand their overseas operations (Moulden & Shanker, 2015).

The overall factors pushing global transactions discussed in section 2.2.7 seem to partly explain the pattern in the industry. However, I believe that consolidation and geographical expansion also play a role. Studies indicate that a new trend of M&A strategies has emerged over the past years, partly triggered by the challenging effect of rising e-commerce and the digitalization of logistics processes. As a consequence, we are observing a rising number of technology driven transactions such as tech start-ups and mobile-apps based software solutions. For instance, in 2014, FedEx acquired Bongo International, a provider of cross-border e-commerce IT solutions, UPS acquired i-Parcel to consolidate its strength in the fast-growing global e-commerce market, and Deutsche Post DHL acquired StreetScooter, a start-up committed to the development of affordable electric vehicles. In 2015, important transactions include the pending \$4.8Bn acquisition of TNT Express by FedEx, the completed \$1.8Bn acquisition of Coyote Logistics by

UPS, and the completed acquisitions of Groupe Nortbert Dentressangle and Con-way by XPO Logistics, with a deal value of \$2.3Bn and \$3Bn , respectively (Annex 8).

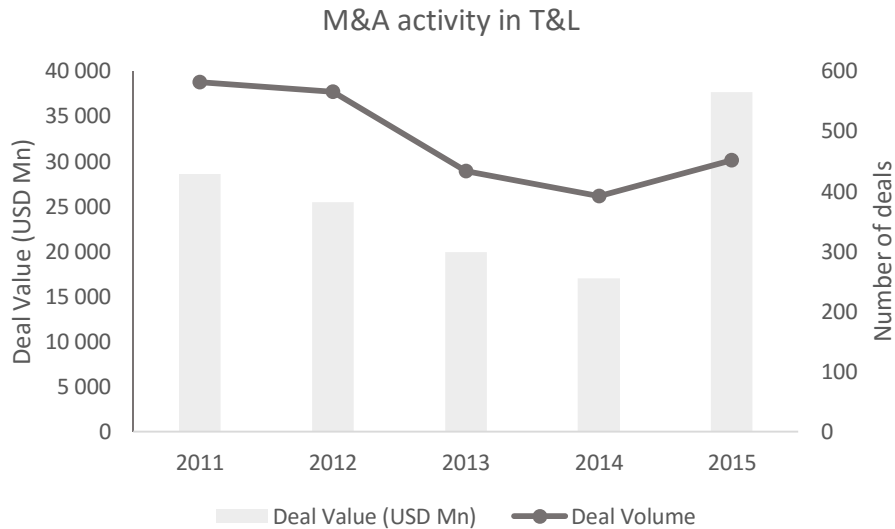


Figure 28: Deal value and volume in the Transportation and Logistics Industry over the period 2011-2015.

Source: Market Line

Following the trend of global M&A, it seems that, in 2016, transactions in T&L industry will continue the upward trend, boosted by the growth in U.S. economy, low fuel prices and market consolidation.

9.3. Annex 3: Porter's 5 Forces Model

Freight Forwarding & Logistics

The analysis will be made assuming freight forwarding & logistics companies as the central players whereas the key buyers are companies requiring freight transportation and supply chain solutions, while the main suppliers are related to fuel contractors, planes/shipbuilding/automotive builders and airport/seaport operators.

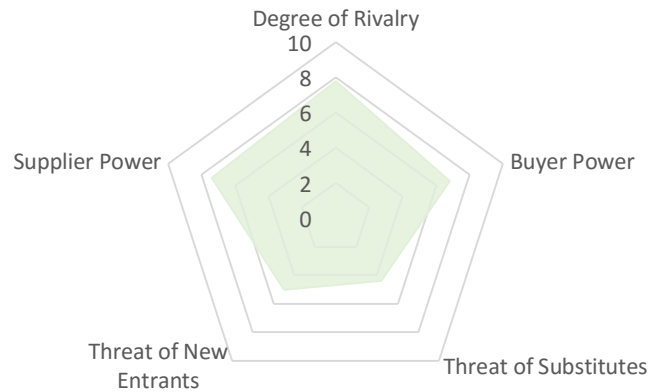


Figure 29: Porter's 5 forces model for the Freight Forwarding and Logistics segment

Overall, the degree of rivalry seems moderate to strong between competitors in each sub-segment and within the industry. There are many players in the logistics segment with medium barriers and exit costs, while in the air and marine industries there tends to be less players and higher entry and exit costs.

The bargaining power of suppliers seems to be between moderate to strong, even though its power varies among each sub-segment. For the freight forwarding segment, there are relatively few number of heavy cargo aircraft and ship producers, which increases their power significantly. Moreover, the long-term contracts entered when buying or leasing freights tend to strengthen the suppliers position, by increasing the switching costs. Also the limited access to infrastructure, such as ports, airports and networks, conditions the freight companies operating in this area, being dependent on operators. Another major input used in the industry is the aviation fuel and diesel oil, which also tends to be supplied by a few number of large, multinational oil companies. On a smaller scale, the labor supply may be a threat through unionization due to the necessity of high skilled employees (pilots, marine freight drivers). In contrast, the supplier power is weakened by the unlikely forward integration.

The bargaining power of buyers is considered moderate. There are numerous customers, mostly corporate, with a significant but not crucial buyer size. These power and buyer size of each customer depends on the segment: in air and maritime freights, the customer tends to be larger companies with high power, with no or reduced brand loyalty, low switching costs, and weak differentiation level among competitors. In the logistics segment the customer has lower

bargaining power due to the long-term contracts, the learning curve and set-up time necessary for the logistics company to adapt to the customer. These factors create high switching costs to customers, diminishing their power. However, in this segment there is a threat of backward integration through in-house logistics.

The threat of new entrants is assessed as weak to moderate. In the air and maritime segment, the high level of entry costs and the known economies of scale, tend to discourage new entrants. Moreover, the complex regulation and the access to infrastructure create difficulties for new players. In the logistics segment, the reputation, high switching costs and the already fragmented industry tend to protect the incumbents.

The threat of substitutes mainly comes from each industry in the group and it is considered weak. The rail and road segments, which are not considered directly in this analysis, present themselves as substitutes. Considering the industry as a whole, the major substitutes are in-house transportation and logistics.

CEP segment

The analysis will be conducted taking the view of the CEP providers. The major buyers will be companies who need to ship their products, while the key suppliers are the aircraft and vehicle manufacturers.

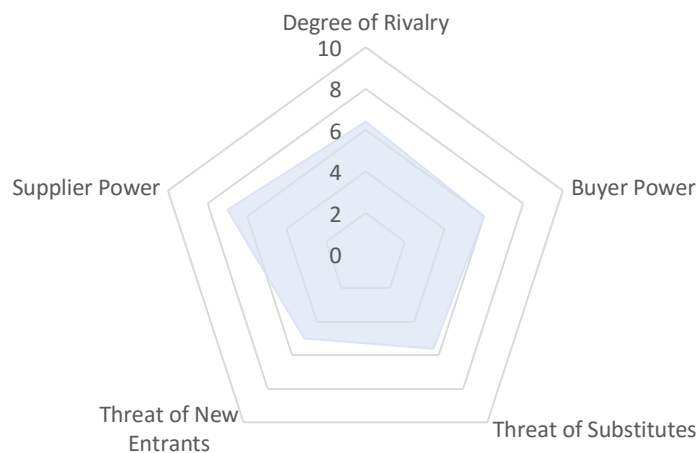


Figure 30: Porter's 5 forces model for the CEP segment

The degree of rivalry is considered moderate in the CEP industry. There are large international players such as UPS, FedEx and DHL that dominate the market offering little differentiation in the services provided.

The bargaining power of supplier seems to be moderate to strong with a fairly similar situation to the one described in the freight forwarding segment regarding the small number of vehicle suppliers, difficult access to infrastructures and significant fuel costs.

The power of buyers can be described as moderate. There are a high number of customers, usually with a fixed-term contract, which tends to increase the switching costs, hence, reduce their power. Most customers are not sensitive to price but rather to the time of delivery with most of them depending on just-in-time inventory to do their businesses. On the other hand, the low service differentiation and the possibility to integrate backwards, through the set-up of their own in-house logistics, gives them a significant market power.

The possibility of new firms to enter the market is considered low to moderate. The market is already dominated by large, international brands, with a strong reputation in an industry where confidence and timing are crucial. Moreover, economies of scale, switching costs and medium entry costs seem to protect the incumbent players.

At last, substitutes to this industry are accessed as moderate. The major alternatives are the in-house logistics through backward integration. However, these may include more costs rather benefits and CEP providers are usually considered a cheaper solution.

9.4. Annex 4: UPS – SWOT analysis

UPS has a size and scope effect that most companies operating in this industry do not benefit from. In fact, these are the major strengths since they allow the company to cross-sell their solutions and offer integrated and complete approaches.

Its major weaknesses rely on the strong dependence on the U.S. market, being subject to demand and general macroeconomic conditions, and on the legal proceedings that occur from the normal conduct of businesses in this industry.

Opportunities come from the positive growth estimates for the sector and the growing demand for pick-up locations in the parcel segment, which will reduce the last-mile costs. Consolidation

in the industry can work both as an opportunity, if this strategy is pursued by UPS, and as a threat, when competitors acquire.

At last, apart from government regulation, the major threat comes from the crowdsourcing services. These crowdsourcing activities, which can come from players such as Uber Cargo and CitizenShipper, match shippers with couriers according to travel dates and itineraries. It can capture the whole route of the shipment or from UPS’s delivery points to its final destination at more convenient hours, e.g. night. These services may be a threat as they decrease the demand for UPS shipments of parcels, through lower prices, since these crowdshipping activities do not require the heavy-asset infrastructure of warehouses, vehicle fleets, fuel costs and employed drivers that traditional logistics companies have. Currently, this trend is only present in the consumer segment, and mainly for personal shipments, with many start-up companies emerging and expanding. However, some of the players are trying to enter into the business-to-business segment, which obviously creates a larger threat.

| Strengths | Weaknesses |
|--|---|
| <p>Strong and integrated global network</p> <p>Brand reputation and long-term relationships</p> <p>Broad portfolio of services</p> <p>Financial Strength</p> | <p>Heavy dependence on the U.S. market</p> <p>Legal proceedings</p> |
| <p>Positive outlook for the global air freight segment</p> <p>Increase demand for pick-up locations</p> <p>Growth through acquisitions and expansions</p> | <p>Development of crowdsourcing for the business segment</p> <p>Intense competition and industry consolidation</p> <p>Government regulation</p> |
| Opportunities | Threats |

Table 27: SWOT analysis of UPS

9.5. Annex 5: UPS – Shareholder Structure

Shareholder Structure

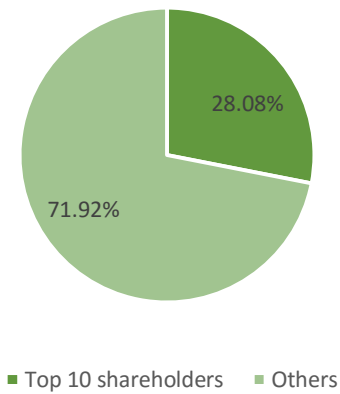


Figure 42: Concentration of shareholder ownership

Top 10 shareholders

ownership

| | |
|---|-------|
| <i>The Vanguard Group</i> | 6.19% |
| <i>Wellington Management Company</i> | 4.28% |
| <i>BlackRock Institutional Trust Company</i> | 4.17% |
| <i>State Street Global Advisors</i> | 3.77% |
| <i>MFS Investment Management</i> | 3.24% |
| <i>Fidelity Management & Research Company</i> | 2.46% |
| <i>Bank of America Merrill Lynch</i> | 1.53% |
| <i>Northern Trust Investments</i> | 0.82% |
| <i>T. Rowe Price Associates</i> | 0.82% |
| <i>Geode Capital Management</i> | 0.80% |

Table 28: Top 10 shareholders, identification and ownership

Shareholders' distribution by type

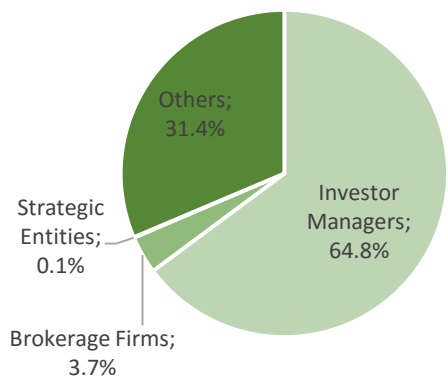


Figure 43: Shareholder distribution by type of investor

Shareholders' distribution by location

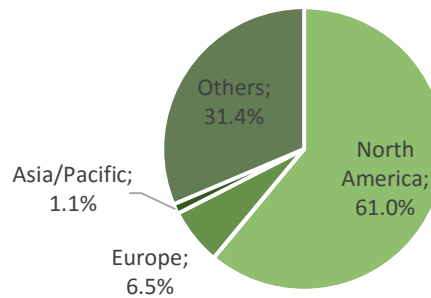


Figure 44: Shareholder distribution by location

9.6. Annex 6: Panalpina – SWOT analysis

Panalpina is one of the top 5 leading companies in the ocean and air freight segments. Adding a diversified portfolio of services and a wide geographic presence, which enables cross-selling and complete supply chain solutions, these are the company’s major strengths. On the other hand, key weaknesses come from legal proceedings, which occur from the industry business, and the lack of scale compared to peers such as DHL or Kuehne+Nagel, which can result in reduced bargaining power. The main opportunities come from the positive growth estimates for the freight sector and the already initiated strategic alliances and partnerships, whose purpose is to strengthen and expand its global network. Major threats come from the government regulation and the intense consolidation trend.

| Strengths | Weaknesses |
|---|--|
| Strong market position in air and ocean freight Extensive portfolio of services Broad geographic presence | Legal Proceedings Small scale compared to competitors |
| Positive outlook for the global air and ocean freight segment Strategic initiatives to expand network | Intense competition and industry consolidation, especially in the logistics segment Government regulation |
| Opportunities | Threats |

Table 29: SWOT analysis of Panalpina

9.7. Annex 7: Panalpina – Shareholder Structure

The largest individual shareholder is a strategic entity, Ernst Göhner Stiftung. This player is a foundation, based in Zug, Switzerland, which has both philanthropic and entrepreneurial character. The Foundation's assets consist mainly of different corporate investments and large real estate holdings with objects mostly in Switzerland.

Shareholder structure

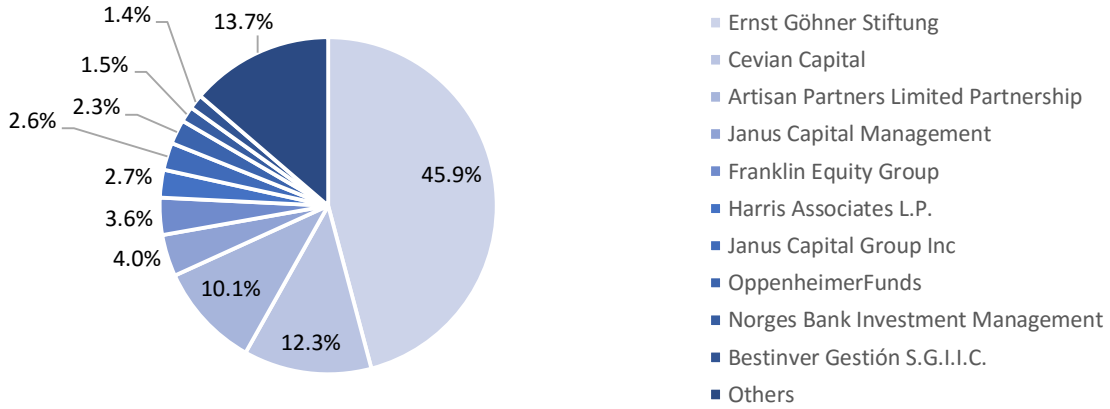


Figure 45: Concentration of shareholder ownership, identification and ownership of major shareholder

Shareholders' distribution by type

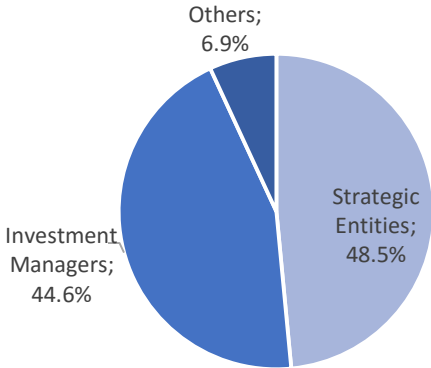


Figure 31: Shareholder distribution by type of investor

Shareholders' distribution by location

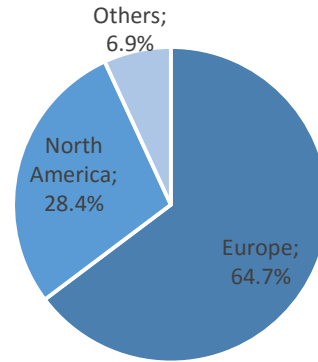


Figure 47: Shareholder distribution by location

9.8. Annex 8: UPS's acquisition history

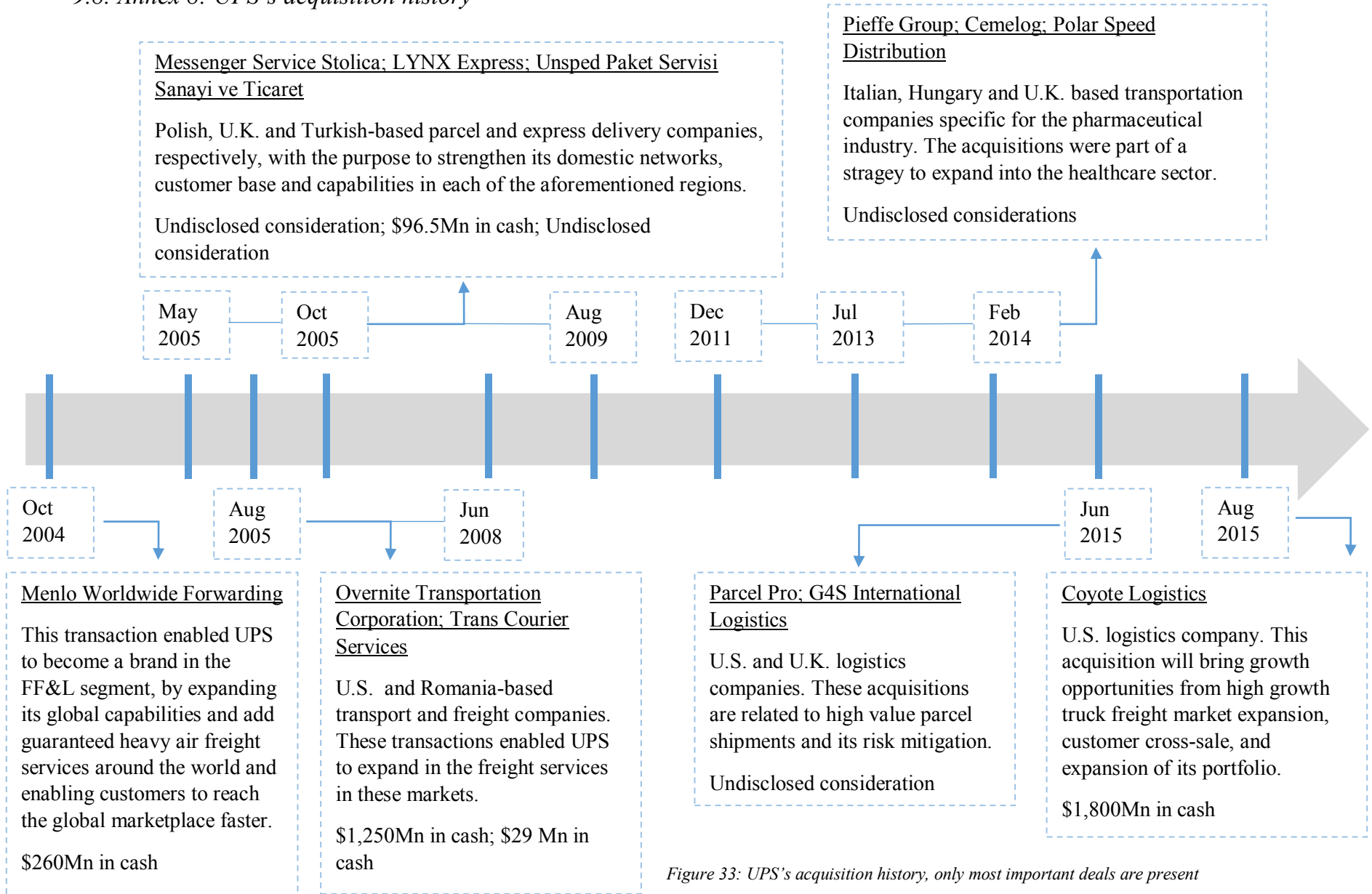


Figure 33: UPS's acquisition history, only most important deals are present

Source: Merger Market, UPS's website, News, Companies' press release

9.9. Annex 9: Revenue Analysis

| Revenue Analysis | | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | |
|------------------------------------|--------------------------------------|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------|
| Domestic Segment | Average daily volume (in thousands): | Next day air | 1,267 | 1,277 | 1,186 | 1,198 | 1,205 | 1,206 | 1,277 | 1,271 | 1,274 | 1,316 | 1,382 | 1,437 | 1,480 | 1,525 | 1,570 |
| | | % growth | | 0.8% | -7.1% | 1.0% | 0.6% | 0.1% | 5.9% | -0.5% | 0.2% | 3.3% | 5.0% | 4.0% | 3.0% | 3.0% | 3.0% |
| | | Defferred | 993 | 974 | 947 | 957 | 941 | 975 | 1,031 | 1,074 | 1,155 | 1,313 | 1,497 | 1,647 | 1,795 | 1,920 | 2,036 |
| | | % growth | | -1.9% | -2.8% | 1.1% | -1.7% | 3.6% | 5.7% | 4.2% | 7.5% | 13.7% | 14.0% | 10.0% | 9.0% | 7.0% | 6.0% |
| | | Ground | 11,537 | 11,606 | 11,443 | 10,895 | 11,140 | 11,230 | 11,588 | 12,060 | 12,893 | 12,969 | 13,358 | 13,892 | 14,448 | 14,737 | 15,032 |
| | % growth | | 0.6% | -1.4% | -4.8% | 2.2% | 0.8% | 3.2% | 4.1% | 6.9% | 0.6% | 3.0% | 4.0% | 4.0% | 2.0% | 2.0% | |
| | Total Avg daily volume | 13,797 | 13,857 | 13,576 | 13,050 | 13,286 | 13,411 | 13,896 | 14,405 | 15,322 | 15,598 | 16,237 | 16,976 | 17,723 | 18,182 | 18,638 | |
| | % growth | | 0.4% | -2.0% | -3.9% | 1.8% | 0.9% | 3.6% | 3.7% | 6.4% | 1.8% | 4.1% | 4.6% | 4.4% | 2.6% | 2.5% | |
| | Average Revenue per piece: | Next day air | 21.1 | 20.9 | 22.0 | 18.0 | 19.1 | 20.3 | 19.9 | 20.1 | 20.4 | 19.7 | 19.5 | 19.7 | 19.9 | 20.2 | 20.5 |
| | | % growth | | -0.9% | 4.8% | -18.0% | 6.3% | 6.2% | -2.0% | 1.0% | 1.5% | -3.7% | -1.0% | 1.0% | 1.0% | 1.5% | 1.5% |
| | | Defferred | 13.6 | 13.7 | 13.9 | 11.8 | 12.5 | 13.3 | 13.1 | 12.7 | 12.6 | 11.7 | 11.5 | 11.6 | 11.7 | 11.9 | 12.1 |
| | | % growth | | 0.4% | 1.8% | -15.2% | 5.8% | 6.6% | -2.0% | -2.8% | -1.0% | -6.9% | -1.5% | 0.5% | 1.0% | 1.5% | 1.5% |
| | | Ground | 6.9 | 7.1 | 7.4 | 7.2 | 7.4 | 7.8 | 7.9 | 8.0 | 7.9 | 8.0 | 7.9 | 8.0 | 8.1 | 8.2 | 8.3 |
| | % growth | | 2.9% | 3.9% | -3.0% | 3.2% | 4.7% | 1.4% | 0.9% | -1.4% | 1.7% | -0.5% | 1.0% | 1.0% | 1.0% | 1.0% | |
| | Total Avg revenue per piece | 8.7 | 8.9 | 9.1 | 8.5 | 8.9 | 9.3 | 9.4 | 9.4 | 9.3 | 9.3 | 9.3 | 9.4 | 9.4 | 9.4 | 9.6 | |
| | % growth | | 1.7% | 3.1% | -6.7% | 3.8% | 5.2% | 0.7% | 0.1% | -1.4% | 0.3% | -0.3% | 1.1% | 1.0% | 1.4% | 1.3% | |
| | Revenue (in millions): | Operating Days in period | 253 | 252 | 252 | 253 | 253 | 254 | 252 | 252 | 253 | 254 | 254 | 254 | 254 | 254 | 254 |
| | | Next day air | 6,778 | 6,738 | 6,559 | 5,456 | 5,835 | 6,229 | 6,412 | 6,443 | 6,581 | 6,570 | 6,831 | 7,176 | 7,465 | 7,804 | 8,159 |
| | | % growth | | -0.6% | -2.7% | -16.8% | 6.9% | 6.8% | 2.9% | 0.5% | 2.1% | -0.2% | 4.0% | 5.0% | 4.0% | 4.5% | 4.5% |
| | | Defferred | 3,424 | 3,359 | 3,325 | 2,859 | 2,975 | 3,299 | 3,392 | 3,437 | 3,672 | 3,903 | 4,382 | 4,844 | 5,333 | 5,791 | 6,231 |
| % growth | | | -1.9% | -1.0% | -14.0% | 4.1% | 10.9% | 2.8% | 1.3% | 6.8% | 6.3% | 12.3% | 10.6% | 10.1% | 8.6% | 7.6% | |
| Ground | 20,254 | 20,888 | 21,394 | 19,843 | 20,932 | 22,189 | 23,052 | 24,194 | 25,598 | 26,274 | 26,940 | 28,298 | 29,724 | 30,622 | 31,547 | | |
| % growth | | 3.1% | 2.4% | -7.2% | 5.5% | 6.0% | 3.9% | 5.0% | 5.8% | 2.6% | 2.5% | 5.0% | 5.0% | 3.0% | 3.0% | | |
| Domestic Revenue | 30,456 | 30,985 | 31,278 | 28,158 | 29,742 | 31,717 | 32,856 | 34,074 | 35,851 | 36,747 | 38,153 | 40,317 | 42,522 | 44,217 | 45,936 | | |
| % growth | | 1.7% | 0.9% | -10.0% | 5.6% | 6.6% | 3.6% | 3.7% | 5.2% | 2.5% | 3.8% | 5.7% | 5.5% | 4.0% | 3.9% | | |
| International Segment | Average daily volume (in thousands): | Domestic | 1,108 | 1,132 | 1,150 | 1,218 | 1,403 | 1,444 | 1,427 | 1,499 | 1,579 | 1,575 | 1,607 | 1,655 | 1,721 | 1,773 | 1,808 |
| | | % growth | | 2.2% | 1.6% | 5.9% | 15.2% | 2.9% | -1.2% | 5.0% | 5.3% | -0.3% | 2.0% | 3.0% | 4.0% | 3.0% | 2.0% |
| | | Export | 689 | 761 | 813 | 796 | 885 | 942 | 972 | 1,034 | 1,115 | 1,151 | 1,203 | 1,269 | 1,351 | 1,433 | 1,490 |
| | | % growth | | 10.4% | 6.8% | -2.1% | 11.2% | 6.4% | 3.2% | 6.4% | 7.8% | 3.2% | 4.5% | 5.5% | 6.5% | 6.0% | 4.0% |
| | | Total Avg daily volume | 1,797 | 1,893 | 1,963 | 2,014 | 2,288 | 2,386 | 2,399 | 2,533 | 2,694 | 2,726 | 2,809 | 2,924 | 3,072 | 3,205 | 3,298 |
| | % growth | | 5.3% | 3.7% | 2.6% | 13.6% | 4.3% | 0.5% | 5.6% | 6.4% | 1.2% | 3.1% | 4.1% | 5.1% | 4.3% | 2.9% | |
| | Average Revenue per piece: | Domestic | 7.0 | 7.6 | 8.1 | 6.9 | 6.7 | 7.2 | 7.0 | 7.1 | 7.0 | 6.1 | 5.9 | 6.0 | 6.1 | 6.2 | 6.3 |
| | | % growth | | 9.6% | 6.0% | -15.3% | -2.8% | 7.7% | -1.8% | 0.3% | -1.3% | -13.1% | -2.0% | 1.0% | 1.5% | 1.5% | 2.0% |
| | | Export | 37.6 | 39.1 | 40.5 | 35.6 | 36.8 | 37.9 | 36.9 | 35.2 | 34.0 | 31.1 | 30.8 | 31.1 | 31.6 | 32.0 | 32.7 |
| | | % growth | | 3.9% | 3.7% | -12.0% | 3.2% | 2.9% | -2.6% | -4.6% | -3.4% | -8.4% | -1.0% | 1.0% | 1.5% | 1.5% | 2.0% |
| Total Avg revenue per piece | | 18.7 | 20.3 | 21.5 | 18.2 | 18.3 | 19.3 | 19.1 | 18.5 | 18.1 | 16.6 | 16.6 | 16.9 | 17.3 | 17.7 | 18.2 | |
| % growth | | 8.3% | 6.1% | -15.3% | 0.4% | 5.3% | -0.8% | -3.1% | -2.1% | -8.3% | -0.3% | 1.9% | 2.4% | 2.6% | 2.7% | | |
| Operating Days in period | 253 | 252 | 252 | 253 | 253 | 254 | 252 | 252 | 253 | 254 | 254 | 254 | 254 | 254 | 254 | | |
| Revenue (in millions): | Domestic | 1,950 | 2,177 | 2,344 | 2,111 | 2,365 | 2,628 | 2,531 | 2,667 | 2,784 | 2,425 | 2,423 | 2,521 | 2,661 | 2,782 | 2,895 | |
| | % growth | | 11.6% | 7.7% | -9.9% | 12.0% | 11.1% | -3.7% | 5.4% | 4.4% | -12.9% | -0.1% | 4.0% | 5.6% | 4.5% | 4.0% | |
| | Export | 6,554 | 7,488 | 8,294 | 7,176 | 8,234 | 9,056 | 9,033 | 9,166 | 9,586 | 9,092 | 9,409 | 10,026 | 10,838 | 11,661 | 12,370 | |
| | % growth | | 14.3% | 10.8% | -13.5% | 14.7% | 10.0% | -0.3% | 1.5% | 4.6% | -5.2% | 3.5% | 6.6% | 8.1% | 7.6% | 6.1% | |
| | Cargo | 585 | 616 | 655 | 412 | 534 | 565 | 560 | 596 | 618 | 632 | 651 | 677 | 704 | 732 | 754 | |
| % growth | | 5.3% | 6.3% | -37.1% | 29.6% | 5.8% | -0.9% | 6.4% | 3.7% | 2.3% | 3.0% | 4.0% | 4.0% | 4.0% | 3.0% | | |
| International Revenue | 9,089 | 10,281 | 11,293 | 9,699 | 11,133 | 12,249 | 12,124 | 12,429 | 12,988 | 12,149 | 12,484 | 13,224 | 14,203 | 15,175 | 16,018 | | |
| Supply Chain and Freight Segment | Revenue (in millions): | Forwarding and Logistics | 5,681 | 5,911 | 6,293 | 5,080 | 6,022 | 6,103 | 5,977 | 5,492 | 5,758 | 5,900 | 6,254 | 6,754 | 7,497 | 8,022 | 8,423 |
| | | % growth | | 4.0% | 6.5% | -19.3% | 18.5% | 1.3% | -2.1% | -8.1% | 4.8% | 2.5% | 6.0% | 8.0% | 11.0% | 7.0% | 5.0% |
| | | Freight | 1,952 | 2,108 | 2,191 | 1,943 | 2,208 | 2,563 | 2,640 | 2,882 | 3,048 | 2,881 | 3,054 | 3,298 | 3,661 | 3,917 | 4,113 |
| | | % growth | | 8.0% | 3.9% | -11.3% | 13.6% | 16.1% | 3.0% | 9.2% | 5.8% | -5.5% | 6.0% | 8.0% | 11.0% | 7.0% | 5.0% |
| | | Other | 369 | 407 | 431 | 417 | 440 | 473 | 530 | 561 | 587 | 686 | 727 | 785 | 840 | 891 | 944 |
| | % growth | | 10.3% | 5.9% | -3.2% | 5.5% | 7.5% | 12.1% | 5.8% | 4.6% | 16.9% | 6.0% | 8.0% | 7.0% | 6.0% | 6.0% | |
| | SC&F Revenue | 8,002 | 8,426 | 8,915 | 7,440 | 8,670 | 9,139 | 9,147 | 8,935 | 9,393 | 9,467 | 10,035 | 10,838 | 11,999 | 12,830 | 13,480 | |
| | % growth | | 5.3% | 5.8% | -16.5% | 16.5% | 5.4% | 0.1% | -2.3% | 5.1% | 0.8% | 6.0% | 8.0% | 10.7% | 6.9% | 5.1% | |
| | Total Revenue | 47,547 | 49,692 | 51,486 | 45,297 | 49,545 | 53,105 | 54,127 | 55,438 | 58,232 | 58,363 | 60,672 | 64,379 | 68,723 | 72,222 | 75,435 | |
| | % growth | | 4.5% | 3.6% | -12.0% | 9.4% | 7.2% | 1.9% | 2.4% | 5.0% | 0.2% | 4.0% | 6.1% | 6.7% | 5.1% | 4.4% | |

Table 30: Detailed revenue analysis by segment and sub segment, including price and volume when possible, for the historical period 2006-15 and the projected period 2016-20

9.10. Annex 10: UPS – Revenue Comparison

| Segment | CAGR 14-19 ⁴³ | | |
|--------------------------|--------------------------|--------|-------|
| | Estimated | Market | UPS |
| U.S. Domestic | 4.3% | 3.4% | 5%-6% |
| International | 3.0% | 3.4% | 5%-7% |
| Supply Chain and Freight | 6.4% | 6.5% | 5%-7% |

Table 31: Comparison of the CAGR 2014-19 of the estimated growth rate with market growth data and UPS's own estimates per segment

According to the own estimated values, UPS is growing more than the market in the *U.S. Domestic* segment, which is justifiable since it reflects the leadership position of UPS, powered by a highly concentrated market, where together with other big players, such as FedEx and DHL, crush the smaller companies and obtain higher growth rates. Moreover, the estimated value is close to UPS's own beliefs.

In the *International CEP* segment, revenues are estimated to grow slightly less than the market and considerably less than the company's beliefs. Considering the international market mainly composed of Europe and Asia, this number is justifiable since UPS is not as strong in these regions as it is in the U.S., with local players detaining significant positions.

In the *Supply Chain and Freight*, UPS is now growing closer to the market rate mainly due to the recent acquisition. Traditionally, UPS has been growing less than the market, since this segment has never been the key focus of the company. In addition, the market is highly fragmented with several players competing for market shares. The estimated value seems to be in line with both market growth and the company's beliefs.

9.11. Annex 11: Capital Expenditures & Net Working Capital

Capital Expenditures

Capital expenditures have been separated into expenditures in PPE and Intangible assets. The estimated values were computed as a percentage of revenues, based on the 2011-15 average, attaining 3.4% for PPE and 0.5% for Intangible assets. The exception to this procedure was 2016

⁴³ Market growth data is limited to 2014-19, so the estimated and UPS values were adjusted to enable comparison

due to detailed information on purchases commitment mentioned in detail in 2015 AR. This estimated value is aligned to UPS's beliefs of the Capex-Revenue ratio evolution, 4-5%.

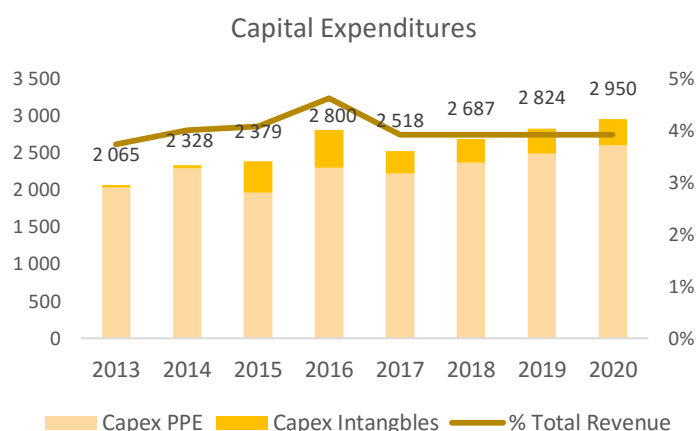


Figure 34: Capital Expenditures, in PPE and Intangible Assets, in USD millions, and total capex as a percentage of total revenues of UPS, for the historical period 2013-15 and the projected period 2016-20

| CAPEX. % Total Revenue | 2013 | 2014 | 2015 | 2016 | 2017-2020 |
|------------------------|------|------|------|------|-----------|
| PPE | 3.7% | 3.9% | 3.4% | 3.8% | 3.4% |
| INTANGIBLES | 0.1% | 0.1% | 0.7% | 0.8% | 0.5% |
| TOTAL | 3.7% | 4.0% | 4.1% | 4.6% | 3.9% |

Table 32: Capital Expenditures, in PPE, Intangible Assets, and total, as a percentage of total revenues of UPS, for the historical period 2013-15 and the projected period 2016-20

Working Capital

Working capital (WC) consists of the difference between Current Assets and Current Liabilities, indicating if the company has enough short term assets to satisfy its short term liabilities. However, for valuation purposes, it is only considered the operational working capital, implying that cash, short term investments and short term debt are not accounted for. Net working capital (NWC) is the difference between the previous and the current WC, expressing if there is a need to invest cash to fulfil the current working capital.

Regarding the estimated values for the Working capital, *Accounts Receivable*, *Accounts Payables* and *Accrued Expenses* were estimated as the average percentage of *Revenues*, *COGS*, and *Labor Costs*, respectively from the period 2011-15, assuming 11.7%, 21.7% and 7.1%. The remaining items of the WC were assumed to remain constant for the estimated period.

I predict that the Working Capital will vary between 1 to 2% of revenues, leading to increasing working capital levels, implying an investment between \$115-156Mn per year, with the exception of 2016, where no investment will be made, according to the predicted values.

| Working capital | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|----------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|--------------|
| Accounts receivable, net | 6,502 | 6,661 | 7,134 | 7,092 | 7,525 | 8,033 | 8,442 | 8,817 |
| Deferred Income tax Assets | 684 | - | - | - | - | - | - | - |
| Other Current Assets | 956 | 1,274 | 1,348 | 1,348 | 1,348 | 1,348 | 1,348 | 1,348 |
| Accounts payables | 2,478 | 2,754 | 2,587 | 2,638 | 2,799 | 2,988 | 3,141 | 3,280 |
| Accrued expenses | 2,325 | 2,373 | 2,253 | 2,281 | 2,421 | 2,584 | 2,715 | 2,836 |
| Other current liabilities | 2,280 | 2,571 | 2,838 | 2,838 | 2,838 | 2,838 | 2,838 | 2,838 |
| Working capital | 1,059 | 237 | 804 | 682 | 815 | 971 | 1,096 | 1,211 |
| Net Working Capital | - 1 | 822 | - 567 | 122 | - 133 | 156 | - 125 | - 115 |
| WC as % of Revenues | 2% | 0% | 1% | 1% | 1% | 1% | 2% | 2% |

Table 33: Evolution of Working Capital, its components, and Net Working Capital, in USD millions and as a percentage of revenues, for the historical period 2013-15 and the projected period 2016-20

9.12. Annex 12: UPS – Financial Statements

Income Statement

| Consolidated Income Statement | | | | | | | | |
|--------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (USD Mn) | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Revenue: | | | | | | | | |
| U.S. Domestic Package | 34,074 | 35,851 | 36,747 | 38,153 | 40,317 | 42,522 | 44,217 | 45,936 |
| International Package | 12,429 | 12,988 | 12,149 | 12,484 | 13,224 | 14,203 | 15,175 | 16,018 |
| Supply Chain & Freight | 8,935 | 9,393 | 9,467 | 10,035 | 10,838 | 11,999 | 12,830 | 13,480 |
| Total Revenue | 55,438 | 58,232 | 58,363 | 60,672 | 64,379 | 68,723 | 72,222 | 75,435 |
| Operating Expenses: | | | | | | | | |
| COGS | 11,513 | 12,343 | 10,525 | 12,134 | 12,875 | 13,744 | 14,444 | 15,086 |
| Gross Profit | 43,925 | 45,889 | 47,838 | 48,538 | 51,504 | 54,979 | 57,779 | 60,349 |
| SG&A | 2,190 | 2,415 | 2,422 | 2,477 | 2,628 | 2,806 | 2,948 | 3,080 |
| Labor Costs | 28,557 | 32,045 | 31,028 | 32,299 | 34,272 | 36,585 | 38,448 | 40,158 |
| Depreciation/Amortization | 1,867 | 1,923 | 2,084 | 2,222 | 2,230 | 2,259 | 2,303 | 2,358 |
| Other operating expense | 4,277 | 4,538 | 4,636 | 4,743 | 5,033 | 5,372 | 5,646 | 5,897 |
| Total Operating Expenses | 48,404 | 53,264 | 50,695 | 53,874 | 57,038 | 60,766 | 63,788 | 66,578 |
| Operating Profit | 7,034 | 4,968 | 7,668 | 6,798 | 7,341 | 7,958 | 8,434 | 8,857 |
| Other Income/Expense: | | | | | | | | |
| Investment Income | 20 | 22 | 15 | 26 | 27 | 28 | 29 | 30 |
| Interest Expense | - 380 | - 353 | - 341 | - 459 | - 473 | - 478 | - 478 | - 470 |
| Total Other Income/Expense | - 360 | - 331 | - 326 | - 433 | - 445 | - 450 | - 449 | - 440 |
| Income before Income Taxes | 6,674 | 4,637 | 7,342 | 6,365 | 6,896 | 7,508 | 7,985 | 8,417 |
| Income Tax expense | 2,302 | 1,605 | 2,498 | 2,188 | 2,371 | 2,581 | 2,745 | 2,893 |
| Net Income | 4,372 | 3,032 | 4,844 | 4,177 | 4,525 | 4,927 | 5,240 | 5,523 |

Table 34: UPS's Income Statement for the historical period 2013-15 and the projected period 2016-20

Balance Sheet

| Consolidated Balance Sheet | | | | | | | | |
|---|-----------------|-----------------|-----------------|---------------|---------------|---------------|---------------|---------------|
| (USD Mn) | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Assets | | | | | | | | |
| Current Assets: | | | | | | | | |
| Cash and cash equivalents | 4,665 | 2,291 | 2,730 | 2,913 | 3,095 | 3,282 | 3,472 | 3,655 |
| Short Term investments | 580 | 992 | 1,996 | 1,996 | 1,996 | 1,996 | 1,996 | 1,996 |
| Accounts receivable, net | 6,502 | 6,661 | 7,134 | 7,092 | 7,525 | 8,033 | 8,442 | 8,817 |
| Deferred Income tax Assets | 684 | - | - | - | - | - | - | - |
| Other Current Assets | 956 | 1,274 | 1,348 | 1,348 | 1,348 | 1,348 | 1,348 | 1,348 |
| Total Current Assets | 13,387 | 11,218 | 13,208 | 13,348 | 13,964 | 14,659 | 15,258 | 15,816 |
| Non-Current Assets: | | | | | | | | |
| Property, Plant and Equipment, net | 17,961 | 18,281 | 18,352 | 18,939 | 19,401 | 19,960 | 20,583 | 21,253 |
| Goodwill, net | 2,190 | 2,184 | 3,419 | 3,419 | 3,419 | 3,419 | 3,419 | 3,419 |
| Intangible Assets, net | 775 | 847 | 1,549 | 1,596 | 1,473 | 1,394 | 1,344 | 1,318 |
| Long Term Investments | 444 | 489 | 473 | 473 | 473 | 473 | 473 | 473 |
| Deferred Income tax Assets | 110 | 1,219 | 255 | 255 | 255 | 255 | 255 | 255 |
| Other Non-Current Assets | 1,345 | 1,202 | 1,055 | 1,055 | 1,055 | 1,055 | 1,055 | 1,055 |
| Total Non-Current Assets | 22,825 | 24,222 | 25,103 | 25,737 | 26,076 | 26,556 | 27,129 | 27,773 |
| Total Assets | 36,212 | 35,440 | 38,311.0 | 39,085 | 40,040 | 41,215 | 42,387 | 43,588 |
| Liabilities and Shareholders' Equity | | | | | | | | |
| Current Liabilities: | | | | | | | | |
| Accounts payables | 2,478 | 2,754 | 2,587 | 2,638 | 2,799 | 2,988 | 3,141 | 3,280 |
| Accrued expenses | 2,325 | 2,373 | 2,253 | 2,281 | 2,421 | 2,584 | 2,715 | 2,836 |
| Current portion of LT debt/Capital leases | 48 | 923 | 3,018 | 501 | 864 | 1,111 | 652 | 1,606 |
| Other current liabilities | 2,280 | 2,571 | 2,838 | 2,838 | 2,838 | 2,838 | 2,838 | 2,838 |
| Total Current Liabilities | 7,131 | 8,621 | 10,696 | 8,258 | 8,922 | 9,521 | 9,345 | 10,560 |
| Non-Current Liabilities: | | | | | | | | |
| Long Term debt | 10,824 | 9,856 | 11,316 | 14,460 | 14,548 | 14,479 | 14,939 | 13,735 |
| Deferred Income Tax Liabilities | 1,244 | 78 | 115 | 115 | 115 | 115 | 115 | 115 |
| Pension and Postretirement Benefit Obligations | 7,051 | 11,452 | 10,638 | 10,638 | 10,638 | 10,638 | 10,638 | 10,638 |
| Other Non-Current Liabilities | 3,474 | 3,275 | 3,055 | 3,055 | 3,055 | 3,055 | 3,055 | 3,055 |
| Total Non-Current Liabilities | 22,593 | 24,661 | 25,124 | 28,268 | 28,356 | 28,287 | 28,747 | 27,543 |
| Shareholders' Equity | | | | | | | | |
| Class A common stock | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Class B common stock | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Additional paid-in capital | | | | | | | | |
| Retained Earnings | 6,925 | 5,726 | 6,001 | 6,068 | 6,272 | 6,917 | 7,804 | 8,995 |
| Accumulated other comprehensive income/loss | - 460 | - 3,594 | - 3,540 | - 3,540 | - 3,540 | - 3,540 | - 3,540 | - 3,540 |
| Deferred compensation obligations | 69 | 59 | 51 | 51 | 51 | 51 | 51 | 51 |
| Treasury Stock | - 69 | - 59 | - 51 | - 51 | - 51 | - 51 | - 51 | - 51 |
| Total Equity for Controlling Interests | 6,474 | 2,141 | 2,470 | 2,537 | 2,741 | 3,386 | 4,273 | 5,464 |
| Non-controlling interests | 14 | 17 | 21 | 21 | 21 | 21 | 21 | 21 |
| Total Shareholders' Equity | 6,488 | 2,158 | 2,491 | 2,558 | 2,762 | 3,407 | 4,294 | 5,485 |
| Total Liabilities and Shareholders' Equity | 36,212.0 | 35,440.0 | 38,311.0 | 39,085 | 40,040 | 41,215 | 42,387 | 43,588 |

Table 35: UPS's Balance Sheet for the historical period 2013-15 and the projected period 2016-20

Cash Fows Statement

| Cash Flows Statement | | | | | | | | |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| (USD Mn) | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Cash Flow from Operating Activities: | | | | | | | | |
| Net income | 4,372 | 3,032 | 4,844 | 4,177 | 4,525 | 4,927 | 5,240 | 5,523 |
| Depreciation/Amortization | 1,867 | 1,923 | 2,084 | 2,222 | 2,230 | 2,259 | 2,303 | 2,358 |
| Deferred taxes | - 246 | 385 | 540 | - | - | - | - | - |
| Pension and postretirement benefit expense (contributions) | 903 | - 489 | 40 | - | - | - | - | - |
| Non-cash items | 582 | 553 | 309 | - | - | - | - | - |
| Changes in Working Capital: | | | | | | | | |
| Accounts receivable | - 515 | - 523 | 452 | 42 | - 433 | - 508 | - 409 | 376 |
| Other current assets | - 13 | 112 | 414 | - | - | - | - | - |
| Accounts payable | 218 | 276 | 147 | 51 | 161 | 189 | 152 | 140 |
| Accrued Expenses | 416 | 106 | 63 | 28 | 139 | 163 | 132 | 121 |
| Other current liabilities | - 140 | 317 | 6 | - | - | - | - | - |
| Other operating activities | - 140 | 34 | 53 | - | - | - | - | - |
| Net cash from operating activities | 7,304 | 5,726 | 7,430 | 6,521 | 6,622 | 7,030 | 7,418 | 7,766 |
| Cash Flow from Investing Activities | | | | | | | | |
| Capital Expenditures (Capex) | -2065 | -2328 | -2379 | - 2,800 | - 2,518 | - 2,687 | - 2,824 | - 2,950 |
| Proceeds from disposals of property, plant and equipment | 104 | 53 | 26 | - | - | - | - | - |
| Purchases of marketable securities | - 2,948 | - 3,525 | - 7,415 | - | - | - | - | - |
| Sales and maturities of marketable securities | 2,957 | 3,106 | 6,388 | - | - | - | - | - |
| Net decrease in finance receivables | 39 | 44 | 5 | - | - | - | - | - |
| Cash paid for business acquisitions | - 22 | - 88 | - 1,904 | - | - | - | - | - |
| Other investing activities | - 179 | - 63 | 30 | - | - | - | - | - |
| Net cash from investing activities | - 2,114 | - 2,801 | - 5,309 | - 2,800 | - 2,518 | - 2,687 | - 2,824 | - 2,950 |
| Cash Flow from Financing Activities | | | | | | | | |
| Net change in short term debt | - | - | 2,529 | - | - | - | - | - |
| Proceeds from long term borrowings | 100 | 1,525 | 3,783 | 3,590 | 900 | 990 | 1,060 | 350 |
| Repayments of long term borrowings | - 1,875 | - 1,694 | - 2,724 | - 3,018 | - 501 | - 864 | - 1,111 | - 652 |
| Purchases of common stock | - 3,838 | - 2,695 | - 2,702 | - 1,441 | - 1,500 | - 1,300 | - 1,200 | - 1,000 |
| Issuance of common stock | 491 | 274 | 249 | - | - | - | - | - |
| Dividends | - 2,260 | - 2,366 | - 2,525 | - 2,669 | - 2,821 | - 2,982 | - 3,152 | - 3,332 |
| Other financing activities | - 425 | - 205 | 175 | - | - | - | - | - |
| Net cash from financing activities | - 7,807 | - 5,161 | - 1,565 | - 3,538 | - 3,922 | - 4,156 | - 4,403 | - 4,634 |
| Effect of exchange rate changes in cash and cash equivalent | - 45 | - 138 | 117 | - | - | - | - | - |
| Net increase (decrease) in cash and cash equivalents | - 2,662 | - 2,374 | 439 | 183 | 182 | 187 | 190 | 182 |
| Cash and cash equivalents: | | | | | | | | |
| Beginning of period | 7,327 | 4,665 | 2,291 | 2,730 | 2,913 | 3,095 | 3,282 | 3,472 |
| End of period | 4,665 | 2,291 | 2,730 | 2,913 | 3,095 | 3,282 | 3,472 | 3,655 |

Table 36: UPS's Statement of cash flows for the historical period 2013-15 and the projected period 2016-20

9.13. Annex 13: Dividends, Stock Repurchase and Debt

Dividends and Stock Repurchase

Dividends and stock repurchase are a clear priority according to the company's Annual Report. For this reason, looking at the positive net income's evolution over the estimated period, previous dividend growth and payout ratio, it was assumed that total dividends would grow by 5.7%, which corresponds to the average growth over the 2013-15 period. This dividend growth implies a payout ratio between 64%, in 2016, and 60%, in 2020.

Regarding the stock repurchase, the 2016 value derives from the remaining value of a share repurchase authorization plan expiring in 2016, while the future repurchase share exhibit a less aggressive plan, which is likely to be pursued by UPS according to the latest Annual Report.

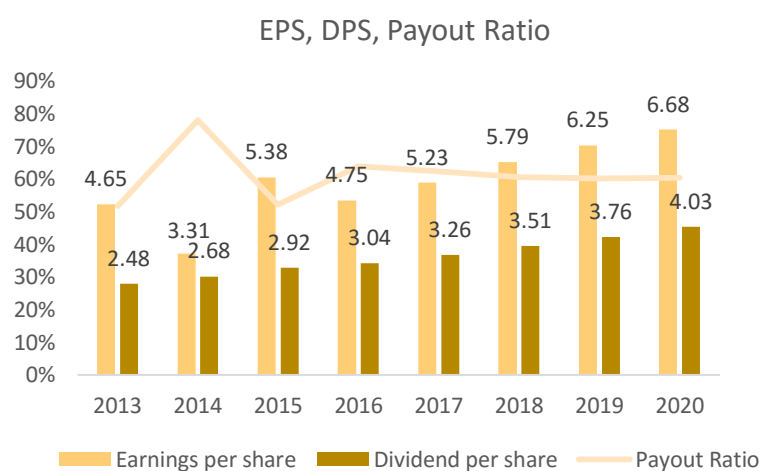


Figure 50: Earnings per share, Dividends per share and Payout ratio for the historical period 2013-15 and the projected period 2016-20, in USD

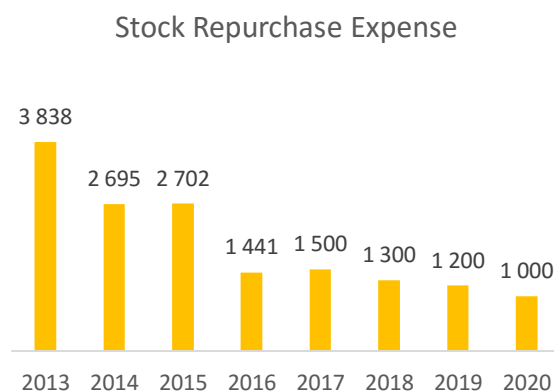


Figure 51: Expenses in stock repurchase for the historical period 2013-15 and the projected period 2016-20, in USD millions

New Debt Analysis

In order to understand if new debt is needed for the future, one looked at the FCFE that UPS is releasing each year and accounted for the cash expended with *dividends, share repurchase, share issue, debt repayment and interest*.

| New Debt Analysis | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| FCFE | 4,500 | 3,246 | - | 4,004 | 4,397 | 4,638 | 4,888 | 5,105 |
| Dividends | - 2,260 | - 2,366 | - 2,525 | - 2,669 | - 2,821 | - 2,982 | - 3,152 | - 3,332 |
| Share repurchase | - 3,838 | - 2,695 | - 2,702 | - 1,441 | - 1,500 | - 1,300 | - 1,200 | - 1,000 |
| Share Issue | 491 | 274 | 249 | - | - | - | - | - |
| Debt Repayment | - 1,875 | - 1,694 | - 2,724 | - 3,018 | - 501 | - 864 | - 1,111 | - 652 |
| Interest | - 409 | - 366 | - 345 | - 459 | - 473 | - 478 | - 478 | - 470 |
| New Debt Necessity | - 3,391 | - 3,601 | - 8,047 | - 3,582 | - 898 | - 986 | - 1,053 | - 349 |

Table 37: New Debt necessity for the historical period 2013-15 and the projected period 2016-20, in USD millions

Taking into account the debt necessity achieved in table 37, assumed as long-term debt issues, as well as debt repayments, and capital leases⁴⁴, it was computed total debt presented in the following table. In the estimated period, total debt increases until 2019, reaching \$15,591Mn, and decreases thereafter.








⁴⁴ Assumed to be the average from 2011-15

| Debt Analysis | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Short term Debt | - | - | - | - | - | - | - | - |
| Current Portion of Long term debt | 9 | 876 | 2,972 | 450 | 812 | 1,059 | 600 | 1,554 |
| Current Portion of capital leases | 39 | 47 | 46 | 51 | 52 | 52 | 52 | 52 |
| Total ST and cur. portion of LT debt | 48 | 923 | 3,018 | 501 | 864 | 1,111 | 652 | 1,606 |
| Long term Debt | 10,390 | 9,398 | 10,887 | 14,027 | 14,115 | 14,046 | 14,506 | 13,302 |
| Long Term Capital leases | 434 | 458 | 429 | 433 | 433 | 433 | 433 | 433 |
| Total long term debt & Capital Leases | 10,824 | 9,856 | 11,316 | 14,460 | 14,548 | 14,479 | 14,939 | 13,735 |
| Total Debt | 10,872 | 10,779 | 14,334 | 14,961 | 15,412 | 15,590 | 15,591 | 15,341 |

Table 38: Debt Evolution for the historical period 2013-15 and the projected period 2016-20, in USD millions

9.14. Annex 14: Peer Group & Multiples

Peer Group Description

| Peer Group | Market Cap (USD Mn) | MV Debt (USD Mn) | D/E (market values) | Revenue (USD Mn) | ROIC | Price to Book value per share | Price to Cash Flow per share |
|---|------------------------|---------------------|---------------------------|---------------------|-------|-------------------------------------|------------------------------------|
|  | 92,683 | 11,316 | 12% | 58,363 | 17.8% | 37.66 | 12.51 |
|  | 43,654 | 10,490 | 24% | 47,453 | 3.6% | 3.55 | 9.90 |
|  | 33,698 | 6,973 | 21% | 66,730 | 7.3% | 2.67 | 9.69 |
|  | 6,915 | 807 | 12% | 13,494 | 7.5% | 1.23 | 8.13 |
|  | 1,810 | 1,157 | 64% | 3,899 | 15.4% | 6.59 | 6.42 |
|  | 4,876 | 212 | 4% | 7,790 | -2.1% | 4.63 | 33.63 |
|  | 2,779 | 2,132 | 77% | 5,231 | 5.8% | 2.09 | 7.17 |
| C. H. ROBINSON | 10,525 | 1,416 | 13% | 13,476 | 30.2% | 9.18 | 15.57 |








| Peer Group | Description | | |
|---|----------------|---|-------------------|
| | Segments | Geography | Country of Origin |
|  | CEP, FF&L | 220 countries but mainly U.S. and Europe | United States |
|  | CEP, FF&L | 220 countries but mainly U.S. and Europe | United States |
|  | CEP, FF&L | 220 countries but mainly U.S. and Europe | Germany |
|  | CEP, Logistics | Mostly European Union Countries | United Kingdom |
|  | CEP | Mostly European countries | Netherlands |
|  | CEP, FF&L | More than 60 countries, but mostly Europe | Netherlands |
|  | CEP, FF&L | Canada and U.S. | Canada |
| C. H. ROBINSON | FF&L | Mostly U.S. | United States |

Table 39: UPS's complete peer group description summary

Source: Thomson Reuters, companies' websites and annual reports








| | |
|---|--|
|  | <p>U.S. based transportation provider, founded in 1971. Currently operates in 220 countries, offering its services through four business segments: Express, Ground, Freight and Services. It directly competes with UPS, being one of the top players in the industry.</p> |
|  | <p>Germany-based transportation provider, founded in 1969. The company operates four main business divisions: Mail; Express; Global Forwarding, Freight; and Supply Chain. The company diversifies its activities into 220 countries, including Germany, rest of Europe, the Americas, Asia Pacific. It directly competes with UPS, being one of the top players in the industry.</p> |
|  | <p>U.K. based postal, parcel and logistics transportation provider, founded in 1516. It mainly operates in European countries, including U.K., Germany, Italy and France. Its core activity is the CEP segment, nevertheless, the company also offers some logistics services.</p> |
|  | <p>Netherlands-based postal company, which operates mail and parcel networks in its base country, Germany, Italy and U.K. Its customers range from individuals to small businesses, retailers to multinationals. The company demerged from TNT Express in May 2011, being responsible for the majority of its CEP segment.</p> |
|  | <p>Founded in Australia in 1958, but operating as base country in Netherlands, the company collects, transports and delivers documents, parcels and freight on a time-certain or day-definite basis. It has own operations in more than 60 countries and can deliver to more than 200 countries through own operations, subcontractors and agents. Its customers are international companies, as well as small and medium enterprises, operating in the technology, automotive, industrial, healthcare and lifestyle industries. It competes with UPS, being one important player in the industry.</p> |
|  | <p>Canadian-based company engaged in transportation and logistics services across North America. The company's segments include Package and Courier, Freight, and Logistics. It offers services to retail, energy, automotive, waste management, food and beverage, forest products, and metals and mining industries.</p> |
|  | <p>U.S. based company which provides freight transportation services and logistics solutions to companies of all sizes, in a variety of industries. It mainly operates in North America.</p> |

Table 40: Peer Group full company description

Source: Reuters, Companies' websites and annual reports

Peer Group multiples

In this section I present the multiple analysis with the complete peer group. As observable, the results are significantly lower, with the exception of the P/E. Since these multiples include companies that do not operate in all three UPS's segments, they are not subject to the same conditions, hence, the multiples can mislead the true value of the analyzed company. In order to solve this problem, it was formed the restricted peer group, which better represents UPS.

| Forward multiples | EV/EBIT | EV/FCFF | P/E |
|-----------------------------|----------------|----------------|------------|
| FedEx Corporation | 21.32 x | 80.61 x | 15.18 x |
| Deutsche Post (DHI) | 12.40 x | 25.26 x | 13.15 x |
| Royal Mail PLC | 9.30 x | 21.31 x | 14.29 x |
| Post NL | 6.02 x | 22.24 x | 9.03 x |
| TNT | 28.76 x | 0.00 x | 38.56 x |
| Transforce Inc | 15.19 x | 11.20 x | 13.03 x |
| C.H. Robinson | 13.30 x | 21.47 x | 19.53 x |
| Median | 13.30 x | 21.86 x | 14.29 x |
| Average | 15.18 x | 30.35 x | 17.54 x |
| Value weighted | 16.77 x | 47.32 x | 15.68 x |
| Price per share (\$) | | | |
| Median | 88.93 | 85.64 | 67.91 |
| Average | 103.36 | 124.02 | 83.34 |
| Value weighted | 115.50 | 200.73 | 74.50 |

Table 41: Multiples, EV/EBIT, EV/FCFF, P/E from the complete peer group

9.15. Annex 15: Panalpina – Revenue Comparison

With no clear data from the management, a comparison was made between the estimated growth rates and the market rates, as can be observed in table 42. There is a significant difference in the CAGR 2014-19, however such difference comes from the 2015 values, since revenue fell by 12.7%, assuming a number significantly lower than the one predicted in the market values. Comparing the estimated market growth rates with the CAGR 2015-20, we find closer values and predictions that Panalpina will grow above the market in the air and ocean freight and lower in the logistics segment.

| Segment | CAGR 14-19 ⁴⁵ | | CAGR 15-20 |
|---------------|--------------------------|--------|------------|
| | Estimated | Market | Estimated |
| Air Freight | 2.00% | 6.27% | 7.12% |
| Ocean Freight | 3.27% | 6.26% | 6.72% |
| Logistics | 1.28% | 6.80% | 5.60% |

Table 42: Comparison of the CAGR 2014-20 of the estimated growth rate with market growth data and UPS's own estimates per segment

9.16. Annex 16: Capital Expenditures & Net Working Capital

Capital Expenditures

As in UPS, capital expenditures have been separated into expenditures in PPE and Intangible assets. The values were estimated as a percentage of revenues, based on the 2011-15 average, attaining 0.42% for PPE and 0.33% for Intangible assets. Even though this value may seem low, one should consider that this firm mostly operates under leasing agreements and buys capacity to carriers, leading to small values of fixed assets, and implying low capex levels.

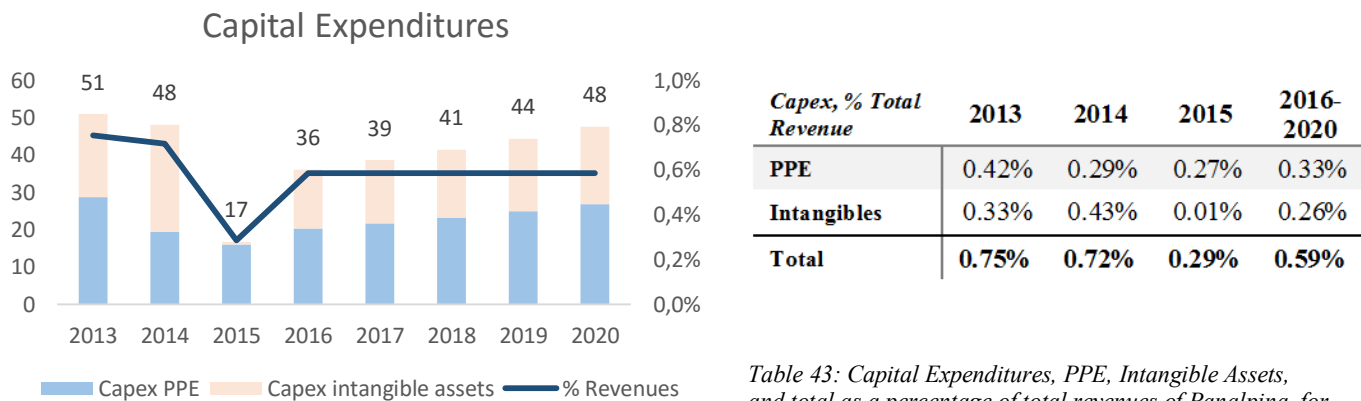


Figure 35: Capital Expenditures, PPE and Intangible Assets, in CHF millions, and total capex as a percentage of total revenues of Panalpina, for the historical period 2013-15 and the projected period 2016-20

Table 43: Capital Expenditures, PPE, Intangible Assets, and total as a percentage of total revenues of Panalpina, for the historical period 2013-15 and the projected period 2016-20

Net Working Capital

As previously explained, it was not used the common definition of WC but the operational one. Hence, *Accounts Receivable* and *Inventory* were computed based on the historical 2011-15 average percentage of *Revenues*, assuming 15.3% and 1.3%, respectively, *Accounts Payables* as a percentage of *COGS*, attaining 10.9%, and both *Accrued Expenses* and *Accrued Cost of*

⁴⁵ Market growth data is limited to 2014-20, so the estimated values were adjusted to enable comparison

Services as the average percentage of total *SG&A* and *Labor Costs*, from the aforementioned period, assuming 11.4% and 15.1%, respectively. The remaining items of the WC were assumed to remain constant for the estimated period.

With this procedure, I predicted an increasing working capital, stabilizing at 3% of revenues, hence leading to an investment in working capital between F13-33Mn per year.

| Working capital | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|-------------|-------------|------------|-------------|-------------|-------------|-------------|-------------|
| Accounts receivable, net | 1,060 | 1,013 | 888 | 946 | 1,012 | 1,083 | 1,162 | 1,247 |
| Unbilled forwarding services - Inventory | 91 | 111 | 66 | 82 | 87 | 94 | 100 | 108 |
| Other Current Assets | 111 | 104 | 106 | 106 | 106 | 106 | 106 | 106 |
| Accounts payables | 577 | 534 | 446 | 508 | 544 | 582 | 625 | 670 |
| Accrued expenses | 152 | 158 | 150 | 151 | 161 | 172 | 182 | 195 |
| Accrued cost of services | 184 | 206 | 223 | 200 | 213 | 227 | 242 | 258 |
| Other current liabilities | 157 | 128 | 94 | 94 | 94 | 94 | 94 | 94 |
| Working capital | 191 | 203 | 147 | 180 | 194 | 208 | 227 | 245 |
| Inv in working capital | - 37 | - 12 | 55 | - 33 | - 13 | - 15 | - 18 | - 18 |
| <i>WC as % of Revenues</i> | 3% | 3% | 3% | 3% | 3% | 3% | 3% | 3% |

Table 44: Evolution of Working Capital and its components, in CHF millions and as a percentage of revenues, and Net Working Capital for the historical period 2013-15 and the projected period 2016-20

9.17. Annex 17: Panalpina – Financial Statements

Income Statement

| Consolidated Income Statement | | | | | | | | |
|---------------------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| (CHF Mn) | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Revenue: | | | | | | | | |
| Air Freight | 3,056 | 3,142 | 2,646 | 2,800 | 3,011 | 3,224 | 3,468 | 3,732 |
| Ocean Freight | 2,781 | 2,835 | 2,587 | 2,713 | 2,890 | 3,094 | 3,329 | 3,582 |
| Logistics | 921 | 730 | 623 | 654 | 693 | 741 | 778 | 817 |
| Total Revenue | 6,758 | 6,707 | 5,855 | 6,167 | 6,594 | 7,059 | 7,576 | 8,131 |
| Operating Expenses: | | | | | | | | |
| COGS | 5,197 | 5,121 | 4,382 | 4,662 | 4,985 | 5,336 | 5,727 | 6,146 |
| Gross Profit | 1,561 | 1,586 | 1,474 | 1,505 | 1,610 | 1,723 | 1,849 | 1,985 |
| SG&A | 418 | 412 | 386 | 389 | 416 | 445 | 478 | 513 |
| Labor Costs | 960 | 977 | 896 | 937 | 996 | 1,059 | 1,121 | 1,195 |
| Depreciation/Amortization | 53 | 57 | 51 | 44 | 45 | 47 | 50 | 53 |
| Goodwill and customer list impairment | 19 | - | - | - | - | - | - | - |
| Fines | 41 | - | - | - | - | - | - | - |
| Other operating expense | 22 | 23 | 23 | 22 | 23 | 25 | 27 | 29 |
| Total Operating Expenses | 6,710 | 6,590 | 5,738 | 6,054 | 6,465 | 6,913 | 7,403 | 7,935 |
| Operating Profit | 48 | 117 | 117 | 113 | 129 | 146 | 173 | 195 |
| Other Income/Expense: | | | | | | | | |
| Investment Income | 4.0 | 3.4 | 3.9 | 5.3 | 5.6 | 6.1 | 6.6 | 7.3 |
| Interest Expense | - 16.5 | - 4.7 | - 3.5 | - 1.8 | - 2.8 | - 2.8 | - 2.8 | - 2.8 |
| Total Other Income/Expense | - 12.5 | - 1.3 | 0.4 | 3.6 | 2.8 | 3.3 | 3.8 | 4.4 |
| Income before Income Taxes | 35 | 115 | 118 | 117 | 132 | 150 | 177 | 200 |
| Income Tax expense | 24 | 29 | 29 | 29 | 33 | 37 | 44 | 50 |
| Net Income | 12 | 87 | 88 | 88 | 99 | 112 | 133 | 150 |

Table 45: Panalpina's Income Statement for the historical period 2013-15 and the projected period 2016-20

Balance Sheet

| Consolidated Balance Sheet | | | | | | | | |
|---|--------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|
| (CHF Mn) | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Assets | | | | | | | | |
| Current Assets: | | | | | | | | |
| Cash and cash equivalents | 337 | 372 | 392 | 414 | 449 | 488 | 535 | 589 |
| Short Term investments | - | - | - | - | - | - | - | - |
| Accounts receivable, net | 1,060 | 1,013 | 888 | 946 | 1,012 | 1,083 | 1,162 | 1,247 |
| Unbilled forwarding services - Inventory | 91 | 111 | 66 | 82 | 87 | 94 | 100 | 108 |
| Other Current Assets | 111 | 104 | 106 | 106 | 106 | 106 | 106 | 106 |
| Total Current Assets | 1,599 | 1,600 | 1,453 | 1,548 | 1,654 | 1,771 | 1,904 | 2,051 |
| Non-Current Assets: | | | | | | | | |
| Property, Plant and Equipment, net | 119 | 104 | 78 | 82 | 87 | 92 | 98 | 104 |
| Goodwill, net | 44 | 45 | 44 | 44 | 44 | 44 | 44 | 44 |
| Intangible Assets, net | 74 | 77 | 55 | 54 | 55 | 57 | 59 | 62 |
| Long Term Investments | 28 | 28 | 27 | 27 | 27 | 27 | 27 | 27 |
| Deferred Income tax Assets | 65 | 68 | 71 | 71 | 71 | 71 | 71 | 71 |
| Other Non-Current Assets | 20 | 7 | - | - | - | - | - | - |
| Total Non-Current Assets | 351 | 329 | 275 | 278 | 284 | 290 | 298 | 308 |
| Total Assets | 1,949 | 1,930 | 1,728 | 1,826 | 1,938 | 2,061 | 2,202 | 2,359 |
| Liabilities and Shareholders' Equity | | | | | | | | |
| Current Liabilities: | | | | | | | | |
| Accounts payables | 577 | 534 | 446 | 508 | 544 | 582 | 625 | 670 |
| Accrued expenses | 152 | 158 | 150 | 151 | 161 | 172 | 182 | 195 |
| Accrued cost of services | 184 | 206 | 223 | 200 | 213 | 227 | 242 | 258 |
| Accrued income tax liabilities | 22 | 26 | 20 | 20 | 20 | 20 | 20 | 20 |
| Current portion of LT debt/Capital leases | 3.05 | 0.52 | 0.14 | 0.03 | 0.15 | 0.15 | 0.15 | 0.15 |
| Other current liabilities | 157 | 128 | 94 | 94 | 94 | 94 | 94 | 94 |
| Total Current Liabilities | 1,096 | 1,052 | 934 | 974 | 1,032 | 1,095 | 1,163 | 1,237 |
| Non-Current Liabilities: | | | | | | | | |
| Long Term debt | 0.21 | 0.13 | 0.03 | 0.17 | 0.17 | 0.17 | 0.17 | 0.17 |
| Deferred Income Tax Liabilities | 17 | 11 | 10 | 10 | 10 | 10 | 10 | 10 |
| Pension and Postretirement Benefit Obligations | 50 | 57 | 61 | 61 | 61 | 61 | 61 | 61 |
| Other Non-Current Liabilities | 78 | 77 | 69 | 69 | 69 | 69 | 69 | 69 |
| Total Non-Current Liabilities | 144 | 145 | 140 | 141 | 141 | 141 | 141 | 141 |
| Shareholders' Equity | | | | | | | | |
| Share Capital | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Retained Earnings | 698 | 721 | 641 | 702 | 758 | 822 | 898 | 982 |
| Additional Paid in Capital | - | - | - | 3 | 5 | 8 | 11 | 14 |
| Treasury Stock | - | 3 | 2 | 2 | 2 | 2 | 2 | 2 |
| Total Equity for Controlling Interests | 698 | 721 | 641.273 | 700 | 753 | 814 | 887 | 969 |
| Non-controlling interests | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Total Shareholders' Equity | 709 | 733 | 653 | 712 | 765 | 826 | 899 | 981 |
| Total Liabilities and Shareholders' Equity | 1,949 | 1,930 | 1,728 | 1,826 | 1,938 | 2,061 | 2,202 | 2,359 |

Table 46: Panalpina's Balance Sheet for the historical period 2013-15 and the projected period 2016-20

Cash flows Statement

| Cash Flows Statement | | | | | | | | |
|---|------------|------------|------------|------------|------------|------------|------------|------------|
| (CHF Mn) | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Cash Flow from Operating Activities: | | | | | | | | |
| Net income | 12 | 87 | 88 | 88 | 99 | 112 | 133 | 150 |
| Depreciation/Amortization | 53 | 57 | 51 | 44 | 45 | 47 | 50 | 53 |
| Non-cash items | 49 | 26 | 23 | - | - | - | - | - |
| Changes in Working Capital: | | | | | | | | |
| Accounts receivable, other current assets and unbilled fc - | 122 | 55 | 47 | - | 73 | - | 71 | - |
| Accounts payable and accrual incl. Accrued cost of servic | 50 | - | 33 | 0 | 40 | 58 | 63 | 68 |
| Other current liabilities | 32 | - | 39 | - | - | - | - | - |
| Net cash from operating activities | 42 | 123 | 152 | 98 | 131 | 145 | 164 | 185 |
| Cash Flow from Investing Activities | | | | | | | | |
| Capital Expenditures (Capex) | - | 51 | - | 48 | - | 17 | - | 47 |
| Proceeds from disposals of property, plant and equipment | 2 | 3 | 10 | - | - | - | - | - |
| Purchases of marketable securities | - | 10 | - | 0 | - | 2 | - | - |
| Sales and maturities of marketable securities | 3 | 1 | 1 | - | - | - | - | - |
| Net decrease in finance receivables | 5 | 0 | 5 | - | - | - | - | - |
| Cash paid for business acquisitions | - | - | 2 | - | - | - | - | - |
| Other investing activities | 3 | 8 | 5 | - | - | - | - | - |
| Net cash from investing activities | - | 48 | - | 36 | - | 9 | - | 47 |
| Cash Flow from Financing Activities | | | | | | | | |
| Proceeds from short and long term borrowings | 1.6 | 0.2 | 0.0 | - | - | - | - | - |
| Repayments of short and long term borrowings | - | - | 2.8 | - | 0.5 | - | 0.1 | - |
| Purchase of non-controlling interest | - | - | - | - | - | - | - | - |
| Purchases of common stock | - | - | 2.8 | - | 5.5 | - | 2.7 | - |
| Issuance of common stock | 4.5 | 2.0 | 1.7 | - | - | - | - | - |
| Share Capital paid back | - | - | - | - | - | - | - | - |
| Dividends | - | 48 | - | 52 | - | 65 | - | 57 |
| Other financing activities | - | - | - | - | - | - | - | - |
| Net cash from financing activities | - | 41 | - | 55 | - | 69 | - | 29 |
| Effect of exchange rate changes in cash and cash equivalent | - | 9 | 4 | - | 53 | - | - | - |
| Net increase (decrease) in cash and cash equivalents | - | 56 | 35 | 20 | 22 | 35 | 40 | 47 |
| Cash and cash equivalents: | | | | | | | | |
| Beginning of period | 393 | 337 | 372 | 392 | 414 | 449 | 488 | 535 |
| End of period | 337 | 372 | 392 | 414 | 449 | 488 | 535 | 589 |

Table 47: Panalpina's Statement of cash flows for the historical period 2013-15 and the projected period 2016-20

9.18. Annex 18: Method A

Under method A, the cost of capital is computed with domestic terms, assuming a value of 6.83%, detailed under table 48:

| Component | Value | Description | Source |
|-----------------------|----------|-------------------------------------|---------------------------------------|
| Cost of Debt | 1.14% | | RBC Capital Markets |
| Tax Rate | 25% | Average Effective tax rate 2014-15 | Panalpina's financials |
| MV of Net Debt | -F392Mn | MV Debt - Cash and Cash Equivalents | Panalpina's financials |
| Cost of Equity | 6.83% | Risk Free -0.41% | 10 year Swiss Gov Bond Swiss Exchange |
| | | Market Risk 6.55% | Historical Average SMI Damodaran |
| | | MRP 6.96% | Market Risk - Risk Free |
| | | Levered Beta 1.04 | 5yr regression, monthly data Reuters |
| MV of Equity | F2,500Mn | Market Capitalization | Reuters |

Table 48: WACC components









With this discount rate and a spot rate of the day prior to the valuation, I achieved an Enterprise Value of \$2,141Mn, and Equity Value of \$2,530Mn and a price per share of \$106.63. Hence the valuation output is extremely close to method B.

| In millions except per share data | | 2016 | 2017 | 2018 | 2019 | 2020 |
|-------------------------------------|---------------|------|------|------|------|-------|
| Discounted Cash flow | | 45 | 69 | 73 | 80 | 1,821 |
| Entreprise Value | 2,088 | | | | | |
| Non controlling interest | 12 | | | | | |
| Net debt | - 392 | | | | | |
| Equity value | 2,468 | | | | | |
| Outstanding shares | 24 | | | | | |
| Equity value per share (CHF) | 103.98 | | | | | |
| Spot rate | 1.0255 | | | | | |
| Equity value per share (USD) | 106.63 | | | | | |

Table 49: Method-A Valuation Output – Enterprise Value, Equity Value and Equity value per share

9.19. Annex 19: Peer Group & Multiples

Peer Group Description

| Peer Group | Market Cap (USD Mn) | MV Debt (USD Mn) | D/E (market values) | Revenue (USD Mn) | ROIC | Price to Book value per share | Price to Cash Flow per share |
|--|------------------------|---------------------|---------------------------|---------------------|------|-------------------------------------|------------------------------------|
|  PANALPINA on 6 continents | 2,564 | 0.17 | 0% | 6,005 | 11% | 4.72 | 18.36 |
|  KUEHNE+NAGEL | 16,625 | 24 | 0.1% | 17,158 | 23% | 13.10 | 18.91 |
|  DHL | 33,488 | 6,929 | 21% | 66,316 | 7% | 2.67 | 9.69 |
|  KERRY LOGISTICS | 2,292 | 1,033 | 45% | 2,715 | 11% | 1.34 | 6.78 |
|  TNT | 4,846 | 210 | 4% | 7,741 | -2% | 4.11 | 29.85 |
|  A.P. MOLLER-MAERSK | 28,430 | 7,398 | 26% | 40,308 | 1% | 0.86 | 3.21 |
|  DSV | 7,990 | 721 | 9% | 7,656 | 13% | 18.85 | 20.52 |
|  Expeditors® | 8,854 | - | 0% | 6,617 | 25% | 5.29 | 17.63 |









| Peer Group | Description | | |
|--|-------------|--|-------------------|
| | Segments | Geography | Country of Origin |
|  PANALPINA on 6 continents | FF&L | Worldwide | Switzerland |
|  KUEHNE+NAGEL | FF&L, Other | Worldwide | Switzerland |
|  DHL | CEP, FF&L | 220 countries but mainly U.S. and Europe | Germany |
|  KERRY LOGISTICS | FF&L | Mainly Asia | China |
|  TNT | CEP, FF | Mainly European countries | Netherlands |
|  A.P. MOLLER-MAERSK | FF&L, Other | EMEA | Denmark |
|  DSV | FF&L | Worldwide, stronger in Nordic countries | Denmark |
|  Expeditors® | FF&L | Worldwide, stronger in north Asia | United States |

Table 50: Panalpina and complete peer group multiples and description summary






| | |
|---|---|
| KUEHNE+NAGEL | Switzerland-based company engaged in the provision of logistics services, founded in 1890. The company is structured into six operating segments: Seafreight, Airfreight, Road & Rail Logistics, Contract Logistics, Real Estate and Insurance Brokers. Furthermore, it diversifies its activities into four geographical regions: Europe; Americas; Asia-Pacific, and Middle East, Central Asia and Africa. It directly competes with Panalpina, being one of the top players in the industry. |
|  | Germany-based transportation provider, founded in 1969. The company operates four main divisions: Mail; Express; Global Forwarding, Freight, and Supply Chain. The company diversifies its activities into 220 countries, including Germany, rest of Europe, the Americas, Asia Pacific and Other regions. It directly competes with Panalpina, being one of the top players in the industry. |
|  | Based on Hong-Kong, China, the company is mainly engaged in the integrated logistics and international freight forwarding businesses. The Company has more than 400 service locations in 35 countries and territories across Asia, Australia and Europe. |
|  | Founded in Australia in 1958, but operating as base country in Netherlands, the company collects, transports and delivers documents, parcels and freight on a time-certain or day-definite basis. It has own operations in more than 60 countries and can deliver to more than 200 countries through own operations, subcontractors and agents. Its customers are international companies, as well as small and medium enterprises, operating in the technology, automotive, industrial, healthcare and lifestyle industries. |
| A.P. MOLLER · MAERSK | Danish company engaged in transportation and energy businesses. It operates in more than 135 countries, but mainly in the EMEA region. |
|  | Denmark-based company which operates in the transport and logistics industry. The Company's operations are divided into three business areas: Air and Sea; Road and Logistics. DSV A/S is active in more than 70 countries in Europe, the Americas, Asia, Africa and Australia, and operates through numerous subsidiaries, including UTi Worldwide Inc. |
|  | U.S. based, logistics and freight company. The company operates worldwide but has a significant presence in Asia. |

Table 51: Peer Group full company description

Source: Reuters, Companies' websites and annual reports

Peer Group multiples

In this section I present the multiple analysis with the complete peer group. As observable, the results are close to restricted group, with the exception of EV/FCFF, which is significantly lower.

| Forward multiples | EV/EBIT | EV/ FCFF | P/E |
|-----------------------------|---------|----------|---------|
| Kuehne+Nagel | 16.52 x | 21.08 x | 24.70 x |
| Deutsche Post (DHL) | 12.40 x | 25.26 x | 13.15 x |
| Kerry Logistics Network Ltd | 10.80 x | n.a. | 15.36 x |
| TNT | 28.76 x | n.a. | 38.56 x |
| AP Moeller Maersk | 28.76 x | 71.96 x | 18.34 x |
| DSV | 20.76 x | 148.20 x | 24.67 x |
| Expeditors International | 11.20 x | 16.33 x | 25.50 x |
| Median | 16.52 x | 25.26 x | 24.67 x |
| Average | 18.46 x | 56.56 x | 22.90 x |
| Value weighted | 19.27 x | 45.62 x | 19.14 x |
| Price per share (\$) | | | |
| Median | 97.30 | 69.38 | 93.46 |
| Average | 106.77 | 135.02 | 86.73 |
| Value weighted | 110.74 | 112.07 | 72.51 |

Table 52: Multiples, EV/EBIT, EV/FCFF, P/E from the complete peer group

9.20. Annex 20: Selected Deals in the Industry

| Announced Date | Target | Bidder | Deal Value (USD Mn) | EV / EBITDA | EV / EBIT | EV / Revenues | Premium | | |
|----------------|---------------------------|-------------------------|---------------------|-------------|-----------|---------------|------------------|--------------------------------|------------------------------|
| | | | | | | | Last trading day | 30 day volume weighted average | Estimated Synergies (annual) |
| 13/03/2016 | KLN Investment | Kerry Logistics Network | 88 | n.a. | n.a. | n.a. | Private company | | n.a. |
| 09/10/2015 | UTi Worldwide | DSV | 1,350 | -43.59x | n.a. | 0.32x | 50% | 34% | \$75Mn |
| 09/09/2015 | Con-way | XPO Logistics | 3,014 | 5.90x | 11.23x | 0.52x | 31.60% | 28.89% | n.a. |
| 31/07/2015 | Coyote Logistics | United Parcel Service | 1,800 | n.a. | n.a. | 0.86x | Private company | | \$100-150Mn |
| 26/06/2015 | ReTrans | Kuehne + Nagel | 235 | n.a. | n.a. | 0.47x | Private company | | n.a. |
| 04/05/2015 | Bridge Terminal Transport | XPO Logistics | 100 | 8.06x | n.a. | 0.43x | Private company | | n.a. |

| | | | | | | | | | |
|------------|---|---|-------|--------|--------|-------|-----------------|--------|----------------------|
| 28/04/2015 | Norbert Dentressangle | XPO Logistics | 3,520 | 10.13x | 20.90x | 0.63x | 34% | 38.01% | n.a. |
| 07/04/2015 | TNT Express | FedEx | 4,456 | 29.22x | n.a. | 0.57x | 33.24% | 44.01% | n.a. |
| 09/02/2015 | UX Specialized Logistics | XPO Logistics | 59 | 7.20x | n.a. | 0.52x | Private company | | n.a. |
| 20/01/2015 | Wheels Group | Radiant Logistics | 74 | 5.21x | 8.67x | 0.23x | 27.60% | 35.10% | \$2390, cost savings |
| 05/01/2015 | Smart Lines Transportation Group | ABF Logistics | 5 | n.a. | n.a. | 0.29x | Private company | | n.a. |
| 15/12/2014 | GENCO Distribution Systems | FedEx Corporation | 2,000 | n.a. | n.a. | 1.25x | Private company | | n.a. |
| 31/07/2014 | Jacobson Holding Company, L.C. | Norbert Dentressangle SA | 750 | 9.87x | n.a. | 0.94x | Private company | | n.a. |
| 29/07/2014 | Simply Logistics | XPO Logistics | 37 | 5.89x | n.a. | 0.58x | Private company | | n.a. |
| 24/07/2014 | Contrans Group | TransForce | 520 | 6.95x | 11.57x | 0.97x | -0.61% | -0.64% | n.a. |
| 21/07/2014 | Integrated Services; ISI Logistics; ISI Logistics South | Roadrunner Transportation Systems Singapore | 13 | n.a. | n.a. | 0.62x | Private company | | n.a. |
| 18/07/2014 | F.S. Mackenzie | Post | 8 | 8.14x | 8.03x | 0.16x | Private company | | n.a. |
| 02/06/2014 | Transport America | TransForce | 310 | 5.82x | 13.67x | 0.89x | Private company | | n.a. |
| 13/05/2014 | One Stop Logistics | Echo Global Logistics | 37 | 8.67x | n.a. | 0.74x | Private company | | n.a. |
| 14/03/2014 | Unitrans International Corporation | Roadrunner Transportation Systems | 56 | n.a. | n.a. | 0.66x | Private company | | n.a. |
| 06/02/2014 | Online Freight Services | Echo Global Logistics | 9 | n.a. | n.a. | 0.19x | Private company | | n.a. |
| 06/01/2014 | Pacer International | XPO Logistics | 278 | 12.04x | 19.19x | 0.28x | 8.04% | 9.62% | n.a. |

| | | | | | | |
|----------------|------------|--------------|---------------|--------------|------------|------------|
| Median | 168 | 7.63x | 11.57x | 0.57x | 32% | 34% |
| Average | 851 | 5.68x | 13.32x | 0.58x | 26% | 27% |

Table 53: Selected M&A deals that occurred in the industry from January 2014 to March 2016, including target, bidder, deal value, transaction multiples and premiums paid

Source: Merger Market, companies' website, News, Companies' press release

| Announced Date | Target | Bidder | Description |
|-----------------------|--------------------------|---------------------------------|---|
| 09/10/2015 | UTi Worldwide Inc. | DSV A/S | <u>DSV A/S</u> , listed Denmark-based company, is a supplier of transport and logistics services. <u>UTi Worldwide Inc.</u> , listed U.S. based group, is an integrated logistics company providing support chain logistics services and planning and optimization solutions. <u>Rationale:</u> The two companies are operating in an industry where increasingly scale is critical. Hence, joining forces with DSV delivers substantially greater client value and future opportunities for UTi Worldwide, while it is financially attractive for its shareholders. |
| 09/09/2015 | Con-way Inc. | XPO Logistics, Inc. | <u>XPO Logistics, Inc.</u> , listed U.S. based company, is a logistics provider of freight brokerage transportation services. <u>Con-way Inc.</u> , U.S. based company, is engaged in providing transportation and supply chain management services for a range of manufacturing, industrial, and retail customers. <u>Rationale:</u> The acquisition will enable XPO Logistics to become the second largest provider of less-than-truckload transportation in North America, while enabling the company to expand its global contract logistics platform and strengthening its position in the e-commerce sector. On the other hand, the acquisition will enable Con-way to provide better services to its customers and create more career opportunities for its employees. |
| 31/07/2015 | Coyote Logistics, LLC | United Parcel Service, Inc. | <u>United Parcel Service, Inc.</u> has agreed to acquire <u>Coyote Logistics, LLC</u> , U.S. based company engaged in providing third-party logistics services, for a consideration of \$1800 Mn. The acquisition will be funded with available cash resources and through existing and new debt arrangements. <u>Rationale:</u> This acquisition will provide UPS with growth opportunities from high growth truck freight market expansion, Coyote organic growth, customer cross-selling, and expand its portfolio. The transaction combines UPS and its 100,000 package vans and other vehicles with Coyote's experience linking customers to a chain of 35,000 trucking companies. Post acquisition, Coyote will operate as a subsidiary of UPS under the leadership of Jeff Silver, the CEO of Coyote. |
| 26/06/2015 | ReTrans Inc. | Kuehne + Nagel International AG | <u>Kuehne + Nagel International AG</u> , listed Switzerland-based provider of transport, logistics and supply chain management solutions, has agreed to acquire <u>ReTrans, Inc.</u> U.S. based company that provides transportation and logistics management services for transporting goods, <u>Rationale:</u> The transaction is line with Kuehne + Nagel's strategy to grow organically and through acquisition complementing the company and also with the strategy to expand its position as an end-to-end logistics provider in North America. |
| 28/04/2015 | Norbert Dentressangle SA | XPO Logistics, Inc. | <u>XPO Logistics</u> , described above, launched a mandatory public offer for <u>Norbert Dentressangle SA</u> , a France based and listed family-owned transportation and logistics company. <u>Rationale:</u> XPO intends to use the acquired operations of Norbert as a platform to grow its business in Europe. The acquisition will give substantial company-wide cross-selling opportunities. The combined entity will benefit from global scale in contract logistics operations. |
| 20/01/2015 | Wheels Group Inc. | Radiant Logistics, Inc. | <u>Wheels Group Inc. (WG)</u> , the listed Canada-based company is engaged in operating as a provider of third-party logistics and supply chain logistics services. <u>Radiant Logistics, Inc. (RL)</u> , the U.S. based company is engaged in providing logistics, transportation and supply chain management services. <u>Rationale:</u> The acquisition will help to accelerate its growth plans. The transaction is a combination of two companies which share the same vision and provide complimentary services, this will help them to expand operational capabilities and geographic reach. |

Table 54: Detailed Description of Selected M&A deals that occurred in the industry from January 2014 to March 2016

Source: Merger Market, UPS's website, News, Companies' press release

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