A Valuation of the Leveraged Buyout of Staples, Inc.

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Executive summary

This thesis provides an analysis and evaluation of Sycamore Partners´ leverage buyout of Staples Inc. The purpose of this evaluation is to assess whether or not Sycamore Partners paid an appropriate price given the leverage buyout of Staples Inc. The method of evaluating the leverage buyout included, a theoretical understanding of a leverage buyout, a fundamental and strategic analysis of Staples leading to a comprehensive valuation through various valuation methods. Other analysis included an understanding of Sycamore Partners and their previous investments. The different valuation methods applied included a comparable valuation, precedent valuation, leverage buyout valuation and an adjusted present value valuation. The evaluation of the acquisition price, through the different valuation methods, resulted in an overall assessment deeming the acquisition price as appropriate, given an exit year of 2024 and an IRR hurdle rate of 20%.

Table of Contents

PART 1 ... 6
1.1.Introduction ... 6
1.2.Problem formulation ... 6
1.3.Methodology ... 7
1.3.1.Thesis structure ... 7
1.3.2.Method and data ... 8
1.3.3.Limitations ... 8
1.4.What is a LBO ... 9
1.4.1.Mechanism of a LBO ... 10
1.4.2.Value creation in a LBO ... 16
1.5.Staples, Inc. (target) ... 19
1.5.1.History ... 20
1.5.2.Sector ... 20
1.5.3.Products ... 21
1.5.4.Customers ... 21
1.5.5.Distribution ... 22
1.5.6.Geography ... 22
1.6.Sycamore Partners (sponsor) ... 23
1.6.1.Business profile ... 23
1.6.2.Sponsor type and target preferences ... 23
1.6.3.Investment strategy ... 24
1.6.4.Track record ... 25
1.6.5.Management ... 26
PART 2 ... 27
2.1.Valuation types ... 27
2.2.Comparable valuation ... 28
2.2.1.Selection of comparable companies ... 28
2.2.2.Screening for comparable companies ... 28
2.2.3.Selected companies ... 29
2.2.4.Data of the comparable companies ... 30
2.2.5.Benchmark of comparable companies ... 32
2.2.6.Determining value ... 37
2.3.Precedent valuation ... 38

2.3.1.Selection of precedent transactions 38
2.3.2.Screening for precedent transactions 38
2.3.3.Selected transactions 39
2.3.4.Data of the precedent transactions 39
2.4.5.Benchmark precedent transactions 40
2.3.6.Determining value 41
2.4.Fundamental analysis of Staples Inc. 43
2.4.1.The general picture 43
2.4.2.Creating value 44
2.4.3.Reorganizing the accounting statements 45
2.4.4.Reorganizing the reported balance sheet 45
2.4.5.Reorganizing the income statement 51
2.4.6.Operating lease 56
2.4.7.Pension adjustments 57
2.4.8.Cash flow 58
2.4.9.Analysis of Office Depot 59
2.4.10.Analyzing the performance 64
2.4.11.Analysis of ROIC 64
2.4.12.Growth analysis 68
2.4.13.Fundamental analysis conclusion 72
2.5.Strategic analysis 73
2.5.1.The 20/20 strategy 73
2.5.2.PESTEL Analysis (macroeconomic situation) 73
2.5.3.Key drivers of change 78
2.5.4.Porter's five forces 80
2.5.5.Opportunities 85
2.5.6.Threats 85
2.5.7.Strategic capabilities 86
2.5.8.VRIO 88
2.5.9.Strengths 89
2.5.10.Weaknesses 89
2.6.S.W.O.T. 90
2.6.1.T.O.W.S. 90
PART 3 93

3.1.The Transaction 93
3.2.Forecasting 96
3.2.1.Strategic framework 96
3.2.2.Scenarios 96
3.2.3.Assumptions 97
3.3.LBO Model 100
3.3.1.Income statement 100
3.3.2.Balance sheet 101
3.3.3.Cash flow statement 104
3.3.4.Financial structure 104
3.3.5.Debt schedule 105
3.3.6.PPE schedule 105
3.3.7.Return analysis 105
3.3.8.Transaction summary 106
3.4.LBO analysis 107
3.4.1.Scenario 1). Base Exit multiple (4.5x – 6.5x) 108
3.4.2.Precedent valuation exit multiples 109
3.4.3.IRR hurdle rage of 20% 109
3.4.4.Exit multiple range of (6.0x to 7.3x) 110
3.4.5.Overall assessment 111
3.4.6.Sensitivity analysis 111
3.5.APV analysis 112
3.5.1.Exit multiple (4.5x – 6.5x) 115
3.5.2.Precedent valuation exit multiples 116
3.5.3.Exit multiple (6.0x to 7.3x) 116
3.5.4.Perpetuity growth rate 117
3.5.5.Overall assessment 117
PART 4 118
4.1.Conclusion 118
4.2.Discussion 119
Bibliography 121
Books: 121
Data Sheets: 121
News Articles, websites and blogs: 121

Reports: 123
Annual Reports and company filings: 125
Papers: 125
Appendix 129
Appendix 1, exhaustive history time line of Staples 129
Appendix 2, exhaustive list of products and services of Staples 129
Appendix 3, Staples worldwide retail stores and distribution center 130
Appendix 4, Sycamore's acquisition history 130
Appendix 5, detailed deal overview of Sycamore's historical investments 131
Appendix 6. Staples Reported balance sheet 132
Appendix 7. The reported deferred income taxes. 133
Appendix 8. Office Depot´s individual adjustment tables 133
Appendix 9. Strategic overview options: 139
Appedenix 10: Transaction information 139
Appendix 11. LBO model: Financial structure 143
Appendix 12. LBO model: Debt schedule 144
Appendix 13. LBO model: PPE schedule 145
Appendix 14. Sensitivity analysis – (Implied share price) Exit multiple and exit year 145
Appendix 15. Sensitivity analysis – (IRR) acquisition price and exit multiple 146
Appendix 16. Sensitivity analysis – (IRR) Exit year and exit multiple 147

PART 1

1.1.Introduction

Since the 1980s have Private Equity firms, through engaging into leveraged buyouts (LBO), grown to become a well-known industry in today's business environment. The LBO procedure in particular has gained a negative reputation over the years due to its heavy use of leverage and certain practices commonly used during the holding period. Given these circumstances it would be interesting to investigate how one would approach a LBO valuation of a potential target company and how it differs from a traditional valuation approach. The increased interest in LBOs resulted in the underlying case of this thesis, Sycamore Partners´ acquisition of Staples in 2017, at a share price of $10.25. This particular case is interesting, as it represents a classical LBO transaction of a retail business, but at the same time has distinctive characteristics, such as a carve-out of the target company. While Staples, the target company, has struggled to keep up with the challenging market conditions of the retail business, Sycamore Partners has stunned the private equity sector by having continuous success in turning struggling retail businesses around and yielding above-average returns. This provides a very interesting case of a LBO transaction, with multiple dimensions to take into consideration. The valuation does also give way for applying multiple approaches and alternative valuation methods given the distinct character of LBOs.

Given all these interesting and dimensional aspects of the transaction, it does seem fitting to assess the acquisition price of the target company and thus dwell into the valuation mechanics of a LBO and other adjacent methods.

1.2.Problem formulation

The purpose of this master thesis is to assess the leveraged buyout of Staples Inc. The problem statement of this thesis can be described as follows:

To what extend was the acquisition prices of $10.25 per share, paid by Sycamore Partners to acquire Staples, Inc. in June 2016, appropriate?

To answer this question, it is necessary to get a general understanding of leveraged buyouts, the target company Staples as well as the buyer Sycamore partners. This can be done by asking the following questions:

- What is a leveraged buyout and how does it generate value?
- What kind of business is Staples?
- Who is Sycamore Partners and what are their previous endeavors and history?

In order to valuate Staples based on external and internal factors and past financial performance, the following questions are required.

- What is a comparable valuation and precedent valuation, what do they imply and who are Staples´ closest peers?
- Based on the closest peers, how has Staples performed in terms of value creation compared to them?
- What opportunities and threats does the external environment pose to Staples?
- What strengths and weaknesses does Staples possess in terms of value creation?
- What kinds of scenarios may appropriately describe the potential future of Staples?

- Based on the formulated scenarios, what is the implied share price range of Staples using a LBO valuation?
- Based on the formulated scenarios, what is the implied share price range of Staples using an APV valuation?

When put together the above-mentioned questions will give a comprehensive answer to the problem statement. Further, the questions do provide the reader with a clear direction when going through the thesis.

1.3.Methodology

1.3.1.Thesis structure

This section aims on giving a short overview of the structure of this thesis and the methods and models used along the way. Further it will give short explanations as to why the respective methods and models were chosen.

First off, the thesis will point out the basic theoretical principles underlying a leveraged buyout. It aims on familiarizing the reader with the key terms, procedures, factors and players involved in an LBO and offer a helpful introduction into the topic. This will facilitate the understanding of the concepts and tools used later on. In addition to basic LBO principles and terminology, this chapter will also give an extensive understanding of the concept of value creation in LBOs.

Part 1 will introduce the reader to the target company of this LBO valuation, U.S. office supply retailer Staples. The chapter provides important information on the company, its history, its product selection and its market.

After that, the sponsor of the buyout, Sycamore Partners is introduced and described in more detail. This chapter will provide some insights into the private equity firm buying Staples, its deal history and its investment approaches. Also, it will be possible to see whether and to what extent the previously mentioned principles of value creation can be found in Sycamore’s acquisition strategies.

Part 2, will lead the reader through the process of the comparable and precedent valuation. Both methods aim on giving the target company, Staples Inc., a value range, one based on the analysis of companies comparable to Staples in terms of key business and financial characteristics, and the other based on an analysis of previous transaction that are deemed similar to the buyout of Staples. The value ranges obtained through these two analyses represent the introductory step towards addressing the main question of this thesis, as to whether or not Sycamore Partners has paid the right price when they bought Staples.

Afterwards, in Part 2, follows the fundamental analysis, the first part of the overall analysis. This exhaustive analysis enables a profound insight into Staples’ operational and financial performance and is crucial for the assessment of the strengths and weaknesses Staples may face in the future. Comparing Staples’ performance to that of its closest competitor, Office Depot, will allow the reader to understand Staples’ position among its peers.

The second part of the analysis is the Strategic analysis. The strategic analysis completes the findings of the fundamental analysis in terms determining both intrinsic and extrinsic opportunities and risks (SWOT). In order to identify those, the strategic analysis includes a macroeconomic (PESTEL), an industry-specific (Porter’s five forces) and a company-specific analysis. The chapter ends with a TOWS analysis, identifying future strategies to tackle the risks and take advantage of opportunities. The strategies established in the TOWS analysis will help with the forecasting of Staples future performance.

Part 3 will then provide more specific information on different aspects of the transaction, such as the merger between the target and the acquisition vehicle, the carve-out of Staples into Retail and North American Delivery, as well as the financing structure underlying the buyout.

Next up the strategies identified towards the end of the strategic analysis will be translated into potential scenarios, Staples may face in the future. The scenarios usually range from a downturn, over unchanged premises to upward movements compared to the starting situation. The different scenarios then again will be used to make the necessary forecasting assumptions for Staples' future performance, a crucial element of the later LBO analysis.

The following section will guide the reader through the LBO model used, with which the thesis aims on complementing the previous comparable and precedent valuations. The explanation of the LBO model and all its facets is based on the base scenario, where it is assumed that the future business conditions for Staples remain at the status quo and no major changes in the environment take place.

The next section will then provide an analysis of the LBO through the different scenarios and extrapolating a valuation range of implied shares prices. These implied share prices will assess the acquisition prices.

The LBO analysis is further complemented with an APV valuation which takes the time valuation in to account. The APV analysis will also be based on the different scenarios extrapolating a valuation range of implied shares prices. Further will this analysis provide both a range based upon the same exit multiples used in the LBO analysis and a range based on different perpetuity growth rates.

The conclusion will provide the final assessment derived from the performed valuation methods.

The discussion will evaluate the result and structure of the thesis, together with an overall review of the assumptions and limitations used.

1.3.2.Method and data

Throughout this thesis will there be theory applied coming from the curriculum of the master program, Finance and Investment. Articles, books, scientific papers, news articles and company fillings were further used to explain, assess and analysis.

This LBO case takes an external viewpoint as no internal information is used. This limits the thesis in some regards, requiring the use of assumptions. The data used in this thesis has been sourced from recognized sources as much as possible. This has been done to only rely on reliable data and eliminate the chance of errors.

There is a heavy reliance on direct date disclosed by Staples in connection with the transaction. Some of this data was unaudited.

1.3.3.Limitations

The goal of this thesis is to assess the transaction of Staples through the use of a LBO case. Given that the thesis is an academic assignment, there are certain limitations required in order to balance between theory and practice.

The cut-off date for this thesis is August 2018, meaning that any public information made available after that date is not taking into consideration for the final assessment. The valuation will be based on data from the first and second quarter of 2017.

The thesis takes the perspective of the buy side of the transaction, given that it assesses the valuation based on the acquisition price. This limits the thesis to only taking Sycamore Partners into account as a buyer.

The underlying transaction details will put further limits on the thesis. These details include the sources and uses of funds, the acquisition price, the different kinds of debts used as well as other valuation details disclosed as part of the definitive proxy statement.

While a short theoretical introduction into the topic is given at the beginning, it is, however, assumed that the reader of the thesis is familiar with the concepts of both LBOs and basic corporate finance theories.

A large part of the analysis of the financial performance of Staples will be based on the forms and documents filed by Staples itself. No internal sources of information have been used, all information used in this thesis are publicly available information. The relatively low level of detail in the quarterly reports compared to annual reports limited the fundamental analysis as to not to account for the last twelve months of Staples. The valuation will however take LTM data into account. Information regarding the carve-out of Staples is limited to one single 8-k filing made by Staples.

Many of the valuation approaches are primarily based on multiples, in order to to increase the level of comparability. The valuation methods applied in this thesis are limited to a comparable, precedent, LBO and APV valuation.

A lot of research on the value creation in LBOs has been done over the last years, providing the thesis with exhaustive literature to draw upon. However, this thesis limits itself to the use of one particular scientific working paper for the application of a conceptual framework of value generation.

Capitalized operating leases will be analyzed in the fundamental analysis but will not be part of the valuation section. The limited information in regard to the carve-out lead to the authors of this thesis not having sufficient and adequate information in order to perform a satisfying separation of the leases.

Staples has only one true comparable peer, which limits the information available to the fundamental analysis. A wider category for comparable peers was assessed but this ended up reducing the detail level to an unsatisfying level.

Only a very limited amount of information about Sycamore Partners is disclosed publicly. The primary information used was extracted from their own disclosed sources or through second hand sources.

The carve-out of Staples resulted in two separated units of Staples. The LBO and APV analysis did only base their valuation on one of the parts while a proxy is used for the other part. This has been done in order to limit the complexity of the thesis. In combination with the sources regarding the transaction this points towards a likelihood of Sycamore reselling the unit for which a proxy was used.

The valuations performed in the LBO and APV analysis are limited to an exit year of 2024. This limits the options and scope of the thesis.

Lastly, Sycamore was not the only equity contributor to LBO of Staples. Whoever according to the transaction statement, both the overall equity contribution and Sycamore´s equity contribution are fixed, which means that the assessment of individual contributor´s potential return was deemed unnecessary.

1.4.What is a LBO

A leveraged buyout, short LBO, is the acquisition of a company, business, brand or group of target assets, where typically only around 30% to 40% of the purchase price are provided by the buyer through equity and

the remaining purchase price is funded by taking on a large portion of debt. This allows the buyer to make purchases that exceed his own equity contribution significantly (Rosenbaum and Pearl, 2013). This chapter aims on clarifying the basic principles and procedures of a leveraged buyout transaction.

1.4.1.Mechanism of a LBO

Key participants

As a LBO is a complex and multifaceted transaction, it involves several key players, each of which has a significant role in the execution of the deal. The key participants in such a LBO transaction are the financial sponsors, investment banks, bank and institutional lenders, bond investors and the target management. Below the individual players and their roles are explained a little more in detail.

Financial sponsor(s) – The financial sponsors are the equity providers of the LBO and therefore the so-called buyer of the target. The typical financial sponsors in LBOs are private equity firms, hedge funds or other investment vehicles, who raise capital through third-party investors into so-called pooled funds. The third-party investors investing in such funds most often include pension funds, insurance companies, endowments, sovereign funds and high net worth individuals (Rosenbaum and Pearl, 2013). With the completion of the buyout transaction, financial sponsors, the contributors of equity, take over ownership of the acquired target.

Investment banks – Investment banks can take up two roles in the LBO process. They can act both as financing underwriters and strategic M&A advisors of the deal. The buy-side, meaning the financial sponsors, often engages investment banks to develop and arrange the optimal and preferred financing structure of debt required to fund the purchase price. Here the investment bank's task is to work as a middleman between the buyer and potential debt investors and negotiate a financing structure suitable for both parties and their respective investment goals but that is also able to provide the flexibility necessary for the acquired target to run and thrive properly (Rosenbaum and Pearl, 2013).

Bank and institutional lenders – The actual debt necessary to fund the purchase price is provided by bank lenders such as commercial banks, savings and loan institutions, finance companies and/or institutional lenders, including hedge, mutual, and pension funds, insurance companies and other structured vehicles. The decision of whether the prospective lenders will effectively provide the funds for the transaction or not is based on an extensive process of due diligence, attending bank meetings, assessing business and credit profiles of the target company and consulting various other documents provided by the arranging investment bank. A major focus in the bank's analysis lies on the target's cash flow generation and asset base, which is crucial for assessing whether the target will be able to honor its interest obligations and principal repayments to the lending banks and offers sufficient collateral to comfort the lender on downside risks in the case of bankruptcy (Rosenbaum and Pearl, 2013).

Bond investors – Bond investors are generally institutional investors like high yield mutual funds, hedge funds and pension funds that contribute further debt financing by buying the company's high yield bonds. These bonds are subordinated to bank debt and can be traded on an exchange. Potential bond investors attend so-called "roadshow presentations" where the target management and bankers from the underwriting investment bank market the deal and the investment benefits coming with it, in order to get bond investors on board (Rosenbaum and Pearl, 2013).

Target management – As already mentioned above, also target management is an essential player in the process of the LBO. Their main task is the representing and marketing of the target and its opportunities, both to debt investors and buyers. They provide investors with the information and material necessary to make their final decision of whether to invest in the LBO transaction or not. Further, management may also decide to join the financial sponsors and put some equity of their own in the transaction, leading to them holding a considerable equity interest in the target after the deal is completed. Moreover, a LBO can also be

initiated by the target's current management rather than by a financial sponsor. This scenario is called a management buyout, abbreviated MBO. In the case of a MBO the target management usually still ends up joining forces with a financial sponsor to help them out both financially and expertise wise. MBOs can happen when LBO targets have a considerable amount of management ownership and management is convinced that they're more capable of running and thriving the business than the current owner in place (Rosenbaum and Pearl, 2013).

Characteristics of a strong LBO candidate

While the sector, size and situation of LBO targets may vary and depend on the sponsor's preferences, expertise and resources, there are a few fundamental characteristics a good LBO target should normally have in order to increase the likelihood of a successful deal. The key characteristics of a good LBO candidate are typically a strong and steady cash flow, a leading and defensible market position, opportunities to grow, opportunities to increase efficiency, low capital expenditure requirements, a strong asset base as well as a proven and open-minded target management (Rosenbaum and Pearl, 2013).

Strong and steady cash flow – Stable and predictable cash flows are a critical factor for assessing the target's ability to pay its interest obligations and make principal repayments, considering the high portion of leverage that is loaded on the target as part of the LBO transaction. For obvious reasons this is a particularly relevant factor for debt investors. Typically, strong and predictable cash flows can be found in companies that operate in mature or niche businesses, where customer demand is stable, that have a strong brand name, an established customer base or long-term sales contracts (Rosenbaum and Pearl, 2013).

Leading and defensible market position – A leading and defensible position in a mature market typically means that entry barriers for competitors are high and the likelihoods of eminent disruptions and fundamental changes in the sector are low, which provides further stability and predictability of cash flows of the potential target. A defensible, leading market position often includes established customer relationships, brand recognition, superior products and services, favorable cost structures, scale advantages and others (Rosenbaum and Pearl, 2013).

Growth opportunities – The company's growth opportunities upon acquisition are a relevant factor, especially for sponsors, since profitable growth allows the company to generate more cash, pay down debt faster and increase the enterprise value. Consequently, it allows for a quicker exit of the investment, more exit options and higher returns for equity holders (Rosenbaum and Pearl, 2013).

Opportunities for efficiency enhancement – Another important aspect when evaluating potential LBO candidates is assessing as to what extent efficiency can be improved and costs can be reduced without hurting the business. Cost reductions often include the laying off of staff, decreasing corporate overhead, rationalizing operations, implementing new management information systems or renegotiating more favorable contracts with suppliers and customers. The cost savings make available further cash that can be used to pay down debt and increase equity value (Rosenbaum and Pearl, 2013).

Low capital expenditures – Companies that require high levels of capital expenditures in order to keep the operations running and growing are usually not as welcome to sponsors as companies with low needs of capital investment, simply because they use up large portions of cash that otherwise could have been used to pay down debt. Higher capital expenditure requirements may be balanced out and less relevant if the respective company has strong growth opportunities, high profit margins and a convincing business strategy (Rosenbaum and Pearl, 2013).

Strong asset base – A strong asset base, especially quality tangible assets can be used as collateral for loans. This provides lenders with more security of principal recovery in the case of bankruptcy, and consequently

increases the availability of debt to the borrower, especially low-interest bank debt. And then again, the more low-interest financing available to the borrower, the lower the expenses related to the debt financing. Assets suitable for loan collateral can be more liquid like receivables and inventory, or long-term such as plant, property and equipment (PP&E). Other than that, a strong asset base can also represent high entry barriers for competitors, through the intensive capital investment required to compete (Rosenbaum and Pearl, 2013).

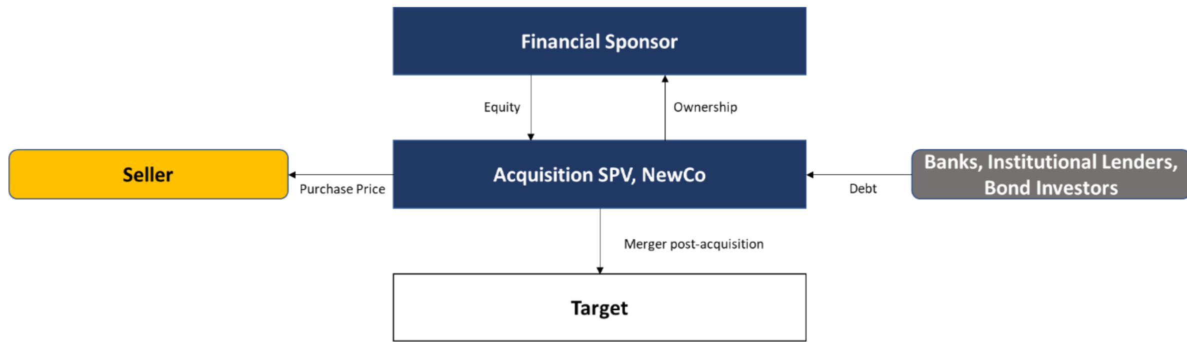
Proven and open-minded target management – Following the LBO transaction, the target is required to operate with a highly leveraged capital structure and has to show results in order to meet the sponsor's ambitious performance objectives. For the LBO to succeed under such premises a talented and experienced target management team is essential. Open-mindedness of the management is also desirable, considering that the sponsor may have significant changes in mind in order for the target company to improve. A management team not open for any such changes may pose critical challenges for the implementation of the new strategy and the success of the entire LBO. When the existing target management is a strong one, the sponsor will likely want to keep the management team after the acquisition and will try to align their incentives by offering them significant equity stakes in the post-acquisition company. On the other hand, if the existing management is rather weak and might be part of the reason the company was not performing too well in the first place, sponsors will likely make changes to the management team or replace it entirely (Rosenbaum and Pearl, 2013).

Low level of existing debt – Due to the substantial amount of leverage taken on as part of the LBO, it is desirable for target companies to have no or only low amounts of debt on their balance sheet prior to the acquisition. Since existing debt likely must be refinanced upon acquisition, larger amounts of existing debt would result in additional costs for refinancing fees and increase the amount of funds necessary to go through with the deal (Characteristics of a good Leveraged Buyout, Fundamental Finance, n.d.).

Undervalued/Out-of-favor companies – LBO sponsors often choose companies that are undervalued and can be purchased at discounted prices as their target since they allow for higher returns and more upside potential (Krantz and Johnson, n.d.).

The process of a LBO

In LBOs a potential financial sponsor usually doesn't acquire the target directly, but rather through a so-called Acquisition SPV (special purpose vehicle). The financial sponsor creates a new corporation, a separate legal entity, that has the sole and single purpose of acquiring the target company. Sometimes this SPV or new corporation is also referred to as NewCo. The financial sponsor will put its equity contribution that is intended to buy the target, in the NewCo SPV, and in return will hold ownership in said NewCo SPV. The NewCo SPV is also the entity that then takes out the loans and issues the bonds necessary to fund the remainder of the target purchase price. With both debt and equity funds available, the NewCo SPV, owned by the financial sponsor, then pays the purchase price to the seller and acquires the target company. Upon acquisition the NewCo SPV is often merged into the target company and the debt taken out by the NewCo SPV is pushed down to the target company. This practice of incorporating the NewCo SPV and the target in one entity after the acquisition usually is already agreed upon prior to the transaction. If a post-buyout merger is not in the picture prior to the deal closure, debt investors would not be likely to provide the necessary financing to the NewCo SPV, considering that the NewCo SPV alone does not generate cash flows and would not be able to service and pay down its debt (Committeri, 2015).



Own creation based on information from Baker McKenzie – Global LBO Guide

The above description of the process of a LBO is a very simplistic one and there are far more advanced and complex scenarios and acquisition structures. They can include several SPVs and separate entities lying between the financial sponsor and the target.

Uses of funds

The uses of funds are ultimately a way of describing the destination of the raised LBO funding, or more precisely, what the whole amount of equity and debt financing is exactly spent on. The major portion of the funds is normally used to *purchase the existing equity* of the target. In case of a public company this means the cost associated with acquiring all the target's common shares outstanding. Sponsors will have to pay a certain premium on the prevailing stock price in order for the existent shareholders to be willing to sell their shares to the sponsor. Further, when the target company has existing debt before the acquisition, some part of the funds will be used to *refinance the existing debt*. The last category of the traditional uses is the payment of all sorts of *fees related to the transaction*. These can be advisory fees to the M&A bankers of the underwriting investment bank, legal fees, any financing-related fees to lenders or others (Investment Banking Technical Training: Leveraged Buyout Analysis, Street of Walls, n.d.).

Sources of funds

Now that it has been established what the LBO funding is spent on, this section aims on identifying in more detail the various sources the funds come from. As mentioned before, the funds necessary for closing a LBO transaction derive to some part from equity provided by a financial sponsor and to a significant part from taking on leverage. However, even within the debt financing, that typically provides 60% to 70% of the purchase price, there are major differentiations to be made. The debt portion of the financing structure does not derive from one source only but usually includes a wide range of loans, securities and debt instruments, which vary in risk, cost, terms and conditions (Rosenbaum and Pearl, 2013). The following are the sources of funds most often used in an LBO:

Bank debt – A significant portion of the debt used to fund the LBO comes from banks, given that they provide the cheapest source of financing available. However, also bank debt can be of various nature and have different terms and conditions that apply. On the one hand, bank debt may be provided in the form of a revolving credit facility, which gives the option to use, repay and reborrow up to an agreed upon limit. On the other hand, banks also provide so-called term loans, which can be divided into different tranches and cannot be reborrowed once they were repaid. Most LBO transactions comprise both types of bank debt as part of their financing structure. Bank debt is a cheap possibility to get funding, however it usually comes with large and restrictive set of conditions and covenants, such as requiring the borrower to maintain a certain credit profile for example (Rosenbaum and Pearl, 2013).

Revolving credit facility – One potential type of a revolving credit facility is the traditional "cash flow" revolver, which is basically a credit line of a prespecified limit that can be drawn, repaid and reborrowed over the specified maturity horizon, usually around five to six years. A revolver usually is one of the cheapest forms of debt used for a LBO and intends on servicing seasonal liquidity shortages and operating capital needs. Since the revolver may remain undrawn, in which case it would provide the lender with rather unattractive returns, lenders charge an annual fee on the undrawn portion of the revolver. Due to its low cost, the revolver comes with several terms and conditions, including the requirement of first priority security interest over other creditors on the target's assets in the case of default (Rosenbaum and Pearl, 2013).

Asset-based lending facility – Another type of revolving credit facility is the asset-based lending facility, abbreviated ABL. The facility gives first priority security interest on all of the target's current assets in the case of bankruptcy and potentially a second priority security interest on non-current assets. It is designed for targets with significant current assets that are subject to seasonality and variable working capital needs, including retailers, certain commodity producers, distributors and manufacturers. Since the current assets securing the facility are extremely liquid, the interest on an ABL is lower than that of a traditional revolver. The credit limit available under the facility is dependent on the size of the respective asset base used as collateral. Moreover, ABL lenders receive additional reports and appraisals for further protection (Rosenbaum and Pearl, 2013).

Amortizing term loans – Term loans are the other form of bank debt, which usually also give first priority security interest to lenders on an equal basis to revolver lenders. The difference is that term loans are indeed fully borrowed upon deal closure and require principal repayments ("amortization") over the prespecified maturity horizon. There are different categories of term loans, one of them being the amortizing term loan, also called "A" term loans or "TLA". As the name already implies, this loan is characterized by its significant principal repayment obligations, making it therefore less risky to investors and the cheapest term loan option available to borrowers in a LBO. Packed together with the revolver, TLAs are usually syndicated to commercial banks or finance companies (Rosenbaum and Pearl, 2013).

Institutional term loans – A more common category of term loans in LBOs are institutional term loans, also referred to as "B" term loans or TLBs. The main differences to the previously mentioned TLAs is that TLBs are usually larger, have a longer maturity and are not amortized consistently over the life of the loan. Instead amortization contributions over the years of the loan are very small, followed by a big bullet payment at maturity. Due to the longer maturity and riskier amortization schedule, this kind of loans is more often sold to institutional investors, who prefer long maturities and higher coupons, and not so much banks, hence also the name of these loans (Rosenbaum and Pearl, 2013).

Second lien term loans – As the name already gives away, second lien term loans have second priority security interest on the borrower's assets and are consequently subordinated to the previously mentioned first lien debt types. This means that in case of bankruptcy the lenders of such loans have claims on the respective collateral after all sorts of first priority security interests have been served. These loans have a variable interest rate, are generally not amortized and have longer maturity than first lien debt. They offer investors a middle way between low coupon first lien debt and riskier, unsecured high yield bonds (Rosenbaum and Pearl, 2013).

High yield bonds – Another source of funding for LBOs besides bank debt is through so-called high yield bonds, a debt security issued by the target company and sold to investors. The bonds require the borrower to make periodic interest payments, often at a fixed rate and repay the entire principal amount upon the prespecified maturity, thus being non-amortizing. Due to their longer maturities, their subordinate, unsecured position in the LBO capital structure, the lack of amortization and their significantly less restrictive requirements and conditions, high yield bonds are a lot riskier for their holders than any of the previously mentioned bank debts, which is why they're compensated with higher premiums. While initially sold to

qualified institutional buyers, so-called QIBs, once registered with the SEC, the high yield bonds can be traded on exchanges (Rosenbaum and Pearl, 2013).

Bridge loans – A bridge loan facility, short “bridge”, is a provisional unsecured term loan provided by the underwriting investment bank. It aims to bridge the time until permanent capital, for example through high yield bonds, is raised and to reassure the seller of the target that the necessary funds for the purchase will be available at the time of closure, whatever the market conditions for high yield bonds may be at that point of time. The bridge is a costly funding option, especially the longer the time it is outstanding and is more perceived as a source of last resort. This is why bridge loans are seldom actually funded in the end. Nonetheless, investment banks providing bridge loans try to syndicate said loans in order to diversify risk (Rosenbaum and Pearl, 2013).

Mezzanine debt – Mezzanine debt is a hybrid financing instrument between regular debt and equity. One the one hand it can benefit from equity upside potential, since it can be converted into common stock of the target company. On the other hand, it is subordinated to all other debt types, therefore bearing more downside risk and thus yielding higher premiums than the other debt classes. It is usually bought by specific mezzanine-oriented funds, insurance companies, hedge funds and business development companies. Since mezzanine debt is individually tailored to fit the respective transaction and investor, it is highly flexible and also a good alternative for midsize and smaller companies, who may not be eligible for the high yield bond markets. But also for bigger companies they can represent an attractive, complementary source of funding besides the high yield bonds. Interest on mezzanine debt usually consists of a mixture between cash and non-cash PIK (payment-in-kind, e.g. additional notes) payments (Rosenbaum and Pearl, 2013).

Equity contribution – The remaining funds come in form of equity from the financial sponsor and potentially to some part from the target management, chipping in on the purchase. Usually the equity contribution makes up for 30% to 40% of the LBO funding. If the target is a big one, it is likely that several financial sponsors come together to a so-called consortium of buyers and buy the target together. The equity is the most junior and riskiest funding source, meaning that it is the first tranche to lose value if the value of the target business decreases. The equity cushion gives comfort to debt holders that the value of the target business has to decline by a portion equal to the equity contribution (30% to 40%) before the holders of the most junior debt need to worry about not getting back their full principal (Rosenbaum and Pearl, 2013).

Exit strategy

The main reason for financial sponsors to engage in a LBO in the first place is the objective to realize substantial returns on their initial equity investment at the end, namely the exit, of their investment. The sponsor can exit the investment either by *selling* the target or through an *IPO*. When selling the target company there are two types of buyers the sponsors may end up with. For one, they may sell the target to another company, also referred to as a “strategic sale”, because the acquiring company is seeking to grow or expand their existent business by acquiring that exact company. Since strategic buyers often expect significant synergies and financial benefits by acquiring another company, they tend to be able to pay higher prices for the target. But with the increasing presence of PE firms and growing LBO activity, exits through sales to other financial sponsors became quite common over the years. Financial sponsor’s ability to compete in the bidding with strategic buyers is highly dependent on the prevailing market conditions and credit availability. When exiting the investment through an IPO, the sponsor sells a certain stake of the target’s shares to the public. An IPO has the potential to can earn the sponsor premiums well above those generated through a sale. However, at the first offering the sponsor normally keeps a majority stake in the target and saves the full exit for later equity offerings. In that way it can still benefit from future upside potential of the target (Rosenbaum and Pearl, 2013).

Returns

Like with any other investment, the major goal of a sponsor investing in a LBO is the realization of an attractive return upon exit of the investment. This means receiving a significant compensation, preferably well above the initial equity investment, for the effort and risk associated with the LBO. The targeted returns of LBOs typically exceed those of alternative investments, and the rule of thumb benchmark lies at around 20%+ annualized return, subject to changes depending on the current market situation.

The most common metric of measuring returns in an LBO is the internal rate of return, short IRR, which represents the return on the entire equity investment, including all equity cash flows to and from the investment such as initial equity commitments, any additional equity contributions later on as well as dividends received over the investment horizon. The IRR adjusts for the time value of money.

Another way to measure the return for the equity investors is the so-called cash return, which calculates the multiple of the cash amount received upon exit over the equity investment made initially. However, this method does not take into consideration the time value of money.

In general, positive returns are generated when the exit value of equity exceeds the value of equity that was invested in the first place. This can be achieved by either growing the business and increasing the overall enterprise value, meaning that the business can be sold at a higher price later on or by paying down debt, thus increasing the share of equity held in the investment. Normally both take place in an LBO. Further, the use of large portions of debt in an LBO allows for higher equity returns as well, simply because if given a fixed exit value, the return on equity is higher the lower the initial equity contribution was. On the downside, highly leveraged companies are lot riskier in the sense that they're more likely to default than companies with lower levels of debt and higher portions of equity (Rosenbaum and Pearl, 2013).

A more detailed explanation on how value can be created follows in the next section.

1.4.2.Value creation in a LBO

A leveraged buyout is a complex endeavor and much research has been done in order to describe the different kinds of value creation a leveraged buyout can potentially deliver. To understand how leveraged buyouts create value and how such a leveraged buyout might affect Staples' financial performance, a more general framework is needed. This framework will provide a valuable, supportive tool for the total assessment and add another dimension to the strategic analysis.

In their working paper "Understanding Value Generation in Buyouts", Achim Berg and Oliver Gottschlag propose a three-dimensional conceptual framework for the value generation in buyouts.

The first dimension relates to the different "**phases of buyout value generation**". The three phases of interest are the acquisition phase, the holding period and the divestment phase. The "acquisition phase" describes the period of negotiation, the due diligence process and acquisition negotiations. Determinants of value creation at that phase include decisions regarding the financial leverage, the distribution of equity stakes, the design of incentives systems, but most important of all, the entry price. The entry price is the single most important determinant of value in the acquisition phase. The next phase is the "holding period", where the determinants of value creation are strategic, organizational and operational changes. The last phase is the "divestment phase", where the divestment mode and ultimate valuation are the determinants of value (Berg, Gottschalg).

The next dimension is based on the "**causes of buyout value generation**". As most buyouts are analyzed from the perspective of an equity investors, a decomposition of the drivers of equity helps to identify the determinants of value generation at this dimension. Equity value is driven by the valuation multiple, revenues, margin, and net debt. Consequently, these are the four determinants of value generation at the

second dimension of the framework. The valuation multiple can also be referred to as a value that is "value capturing", because multiples can increase the value without there being any real changes in the financial performance. The value rather stems from changes in the market valuation multiples of comparable companies, from updated market expectations or even from management negotiation skills. The remaining drivers of equity are determinants of actual "value creation". This sort of value generation is directly linked to fundamental changes in the financial performance. These fundamental changes include improved margins, capital turnover and reduced capital requirements (Berg, Gottschalg). Value creation can be subdivided further, into a primary level and a secondary level of value creation. The primary level represents a direct bottom line effect from operational improvements and strategic distinctiveness. The secondary level represents factors that generate value by enhancing one or more of the primary level factors. For instance, reducing agency cost could potentially improve efficiency without directly influencing the financial performance. (Porter 1985, Stabell & Fjaelstad 1998)

The last dimension concerns the "**Sources of buyout value generation**". This dimension depicts the different kinds of sources that value generation factors originate from. "Intrinsic value generation" describes how value is generated without the help and support from the equity investors. "Extrinsic value generation" is value generated from factors linked to the specific characteristics of equity investors. These include network, expertise, experience, capability and strategy (Berg, Gottschalg). This latter kind of value generation is comparable to the "parenting advantage" often seen in the relationship between multi-businesses and its subsidiaries (Goold et al. 1994).

Having established that three-dimensional conceptual framework for leveraged buyout value creation, the next step is to categorize the most common levers proposed by literature into the framework. This categorization will be done within the "causes of buyout value generation" dimension, as they are the drivers of equity value generation.

Levers of **value capturing** represent opportunities of **financial arbitrage** and are comprised of three different ways of generating returns in the valuation between the time of acquisition and the time of divestment. The first way is financial arbitrage stemming from changes in market valuation, which is the way in which information asymmetries between equity investors and the potential buyers can result in the generation of value. It is possible to distinguish between two different types of asymmetric information. Private information about the portfolio company can be an important value lever in buyouts. This view was particularly common in the early days of buyouts. (DeAngelo et al. 1984, Lowenstein 1985, Wright & Coyne 1985, DeAngelo & Linda 1986, Jensen 1989a, Lehn & Poulsen 1989, Opler 1992). However, the many years of subsequent observations on various buyout performances since then, should have alerted today's potential buyers over such behavior (Thompson et al. 1992). Further, the increase in buyout activity, the professionalization of vendors, the increasing activity of security analysts and the establishment of option auctions as a de-facto standard selling process should have helped to reduce the relevance of insider information significantly as well (Jensen 1989b, Wright & Robbie 1996, Indahl & Zinterhofer 1998, Wright et al. 2001). All in all, this is a kind of value capturing that can take place during both the acquisition and divestment phase. The other kind of asymmetric information is superior market information. This means that potential expertise, extrinsic to the portfolio company, allows for a unique advantage at assessing the value of a business based on market intelligence. This includes associates to the buyout that, with their extensive network and industry expertise, can leverage it into a competitive advantage (Anders 1992, Fox & Marcus 1992). The second type of financial arbitrage are superior deal making capabilities. This relates to the ability of identifying suitable acquisition targets, limiting the competition from other potential buyers and effectively managing the acquisition and divestment phase (Wright & Robbie 1996, Baker & Smith 1998). The last kind of financial arbitrage is given through the optimization of corporate scope, also commonly known as the conglomerate discount effect. Taking advantage of a potential multi-unit company that has less value when put together and more value when divided into pieces, allows for asset stripping and enables equity

investors to capture value (Magowan 1989). This last kind of arbitrage can occur during all three phases of the buyout.

Primary levers of value creation are the factors that are directly affecting the underlying financial performance of a company. These primary levers comprise financial engineering, operational effectiveness and strategic distinctiveness. **Financial engineering** is the optimization of the capital structure and the minimization of the after-tax cost of capital. The equity investors and their associates can leverage their contacts and expertise to negotiate better terms for financing (Magowan 1989). Also their reputation and experience on previous deals can enable them to resort to previous deal contacts and partners in the LBO debt market, which again could end in the getting more favorable terms for their financing (Baker & Smith 1998, Cotter & Peck 2001). This helps to improve complex capital structures and find optimal mixtures, which will then lead to an increase in the debt available in general (Anders 1992). This increased leverage can also lead to corporate tax savings through increasing tax shields, and therefore help to reduce the after-tax cost of capital (Kaplan 1989a, Singh 1990). Other researchers have other views on the effect of increased leverage, including that "borrowing per se creates no value other than tax benefits. Value comes from the operational efficiencies debt inspires" (Rappaport 1990), highlighting the more indirect benefits of debt. All in all, financial engineering has a direct impact on the financial performance of the buyout and is in most cases derived from external players during the acquisition phase but may be altered along the way in the holding period.

The next primary lever is the increase in **operational effectiveness**. Here it is possible to distinguish between cost-cutting and margin improvements, reducing capital requirements and the removal of managerial inefficiencies. Most buyouts lead to substantially changes in both operation and management of the target company (Muscarella & Vetsuypens 1990, Wright et al. 2001). The tightening of control and corporate spending, paired with series of cost reduction programs, lead to a reduction in production cost and significantly increase plant productivity (Lichtenberg & Siegel 1990, Muscarella & Vetuypens 1990, Harris et al. 2002). Moreover, buyout targets experience decreases in corporate overhead cost as a result of less bureaucracy (Easterwood et al. 1989, Butler 2001, Samdani et al. 2001). All these represent measures of cost-cutting and margin improvement. Reducing the capital requirements allows for a more efficient use of the target's capital. With increased inventory control and account receivable management (Magowan 1989, Singh 1990, Long & Ravenscraft 1993c), resulting in a sharp reduction of inventories and receivables compared to pre-buyout levels (Easterwood et al. 1989) targets will end up with significantly smaller amounts of working capital compared to their industry peers (Holthausen & Lacker 1996). Another aspect of reducing capital requirements is adopting stricter practices of controlling capital expenditures, such as cutting unsound investments and divesting unnecessary assets (Magowan 1989, Phan & Hill 1995). With the replacement of inefficient managements further operational effectiveness can be gained (Anders 1992). Buyouts can be used to dispose of inefficient management teams (Jensen & Ruback 1983) and increase performance. The increase in operational effectiveness is another type of direct factors affecting the financial performance and is a combination of both intrinsic and extrinsic factors. Some of these initiatives are developed in the acquisition phase but will first take effect during the holding period. The third and last primary lever is increasing **strategic distinctiveness.** Strategic distinctiveness refers to how the target redefines its key strategic variables, including changes in pricing, product quality, customer service, customer mix and reorganization of distribution channels and as a result increases its operational performance. Corporate refocusing is common trait for buyouts (Seth & Eastwood 1993). This includes the selling of activities that are not considered a competitive advantage or are not of strategic significance (Muscarella & Vetuypens 1990, Hoskisson & Turk 1990, Singh 1990, Anders 1992, Baker 1992, Seth & Easterwood 1993, Baker & Smith 1998). New strategic tendencies have emerged however, and they include the promotion of innovation and acquisition of new lines of business. Buy and build strategies describe how an initial buyout investment scale, through the acquisition of a similar business, can lead to a consolidation in the respective market segment (Seth & Easterwood 1993, Baker & Montgomery 1994, Allen 1990, Wright et al. 2001), establishing itself as a dominant factor on the market through economies of scale. These strategic initiatives

have a direct impact on the financial performance and are achieved through both internal and external forces. Most initiatives are prepared within the acquisition phase and are then implemented during the divestment phase.

Secondary levers of value creation, representing the indirect impacts on financial performance through primary levers, can be subdivided into the reduction of agency costs and parenting advantage. The **reduction of agency cost** is one of the most commonly described value creation levers in buyout literature. What defines the magnitude of an agency problem is the level of prevailing managerial discretion, the degree of misalignment in incentive programs and the degree to which a deviation from shareholder-wealth maximizing can be observed and sanctioned (Berle & Means 1932, Manne 1962, Ross 1973, Fama 1980, Jensen & Meckling 1976, Fama Jensen 1983, Jensen 1986,1989b). With the increased level of debt, the managerial discretion in buyouts is limited and helps to reduce the waste of free cash flow (Jensen 1986). Buyouts also increase incentive alignment of management through an increase in their equity stake during management buyouts (Muscarella & Vetuypens 1990, Baker & Montgomery 1994). In addition to that, buyouts increase the concentration of equity ownership which enables a closer monitoring and more a more active representation in the board of directors (DeAngelo et al. 1984). All these secondary levers of value creation are too a large extent predetermined in the acquisition phase and hold active under the holding period. The **parenting effect** describes how buyout associates can involve themselves in their portfolio companies in order to support value creation. One way of doing that is through the restoring of the entrepreneurial spirit, by giving the target management sufficient freedom to realize innovative ideas. Managers also respond to what some researchers call "LBO fever", implying that a more energized and motivated management team is more willing to take new actions (Houlden 1990, Beaver 2001, Samdani 2001). Other aspects of the parenting effect are the advising and enabling from the parent company, as well as the ways it engages in constructive interaction with the target company. Sometimes lead representatives from the parent serve at the top management´s board and assist with the day-to-day operations and long-term decisions, by providing additional expertise on strategy, markets and external conditions (Sapienza & Timmons 1989, Houlden 1990, Kester & Luehrman 1995, Baker & Wruck 1989, Bruining & Wright 2002). This knowledge transfer can also come from a cross-utilization of managerial talent in the portfolio companies (Hite & Vetsuypens 1989). The parenting effect can take place in all three phases of the buyout and is usually both intrinsic and extrinsic.

The three dimensions, together with the many ways of value creation associated with leveraged buyouts, will be helpful at relating Sycamores Partners' previous endeavors with Staples historical performance. This enables the creation of plausible scenarios and strategic initiatives. These strategic initiatives will be further discussed in the forecasting section.

1.5.Staples, Inc. (target)

Established in 1985 by Leo Kahn and Thomas G. Sternberg in Boston, Massachusetts, Staples Inc. is a leading retailer in office supplies and a provider of related services to businesses of all sizes. Its main operation is in North America, but it also had and to some extent still has, operations in 23 other countries all around the world. Staples serves their customers through a broad selection of products, as well as with an easy access to a website and mobile platforms, making them one of the largest internet resellers in the world.

Staples **mission** is: "*Staples helps the world work better with work solutions that deliver industry-leading products, services and expertise across office supplies, facilities, breakroom, furniture, technology, promotional products, and print & marketing services." – www.staples.com*

Staples **vision** is *"Our vision is we help businesses succeed. This reflects a multi-year effort to evolve our company to become the product and service destination for businesses in a rapidly evolving and competitive marketplace" – (Staples, Inc., Annual Report, 2016)*

Staples' current organization in terms of their segmentation is:

Staples Inc.					
Segment	North American Delivery: U.S. and Canadian Business			North American Retail: Retail Stores	
Business unit	Staples Business Advantage	Staples.com/ Staples.ca	Quill.com	United States	Canada
Description	North America contract business, all sizes and both supplies and services	North America consumers and business, next business day delivery	Small and Mid-sized businesses in U.S. , Both supplies and services	1255 stores in 47 states	304 stores in all provinces

In previous years there has been a third segment named "other" which covered Staples international operations.

1.5.1.History

Staples, Inc. was founded in 1986 and was born out of frustration over too much reliance on small stores for critical supplies. Backed by private equity funds the founders could follow their vision of an office supply superstore. In 1989, an initial public offering was made, raising $36 million. Seven years later Staples climbed into the Fortune 500, having sales surpassing the mark of $3 billion. In the meantime, Staples had also launched its own webpage and entered into both the European and the Canadian market.

The following years Staples increased its presence all over the world and expanded its business platform to serve more businesses and make them commit to online retailing. By 2008, up until now, Staples put less emphasis on expanding geographically, and instead increased its focus on cutting costs as well as shifting towards online servicing and the B2B market.

Over the past several years Staples has struggled with keeping up with new competition such as Amazon and other online retailing companies, resulting in a continued decrease in sales and stock prices for Staples. As a consequence, Staples' management proposed the 20/20 plan in 2016, which aimed to narrow down Staples' operations by discontinuing international operations.

In June 2017, Sycamore Partners, a private equity firm specializing in retailing, acquired Staples, Inc. in an $6.9 billion leveraged buyout. A more exhaustive time line of Staples' history can be found in Appendix 1.

1.5.2.Sector

Using the framework of the industry definition outline provided by the US Department of it is possible to form the following sector overview for Staples.

Staples Inc. Sector overview				
Main	Sector	Industry group	Industry	Sub-industry
	Distribution	Retail stores	Miscellaneous store retailers	Office supplies, stationery and Gift Stores
Other	Sector	Industry group	Industry	Sub-industry
	Distribution	Retail stores	Electronics and appliance stores	Electronics and appliance stores
	Distribution	Retail stores	Furniture and Home furnishing Stores	Furniture stores
	Distribution	Retail stores	Nonstore retailers	Electronic shopping and Mail-order Houses
	Services	Commercial services	Administrative and support services	Business support services
	Services	Commercial services	Administrative and support services	Office administrative Services
	Services	Commercial services	Printing and related support activities	Printing and related support activities

Staples' current main operation is office supplies retailing with a broad B2C and B2B focus. By proper definition a retailer is an enterprise which offers goods and services to end-customers in a particular market. Over the course of the years, however, Staples has expanded its operations to include electronics, furniture

and other office related products. Online services and ordering are also a vital part of Staples' current business and are a fully integrated part of the daily operations. Services related to office supplies such as printing and office, as well as tech services, are also a valuable part of Staples' B2B operations.

1.5.3.Products

Staples core business and services are provided in the table below:

Staples Inc. Products	Staples Inc. Services	Finance center:
Office supplies:	Print services:	Small business loans
Electronics:	Marketing services:	Credit center
Furniture:	Shipping services:	Merchant services
Cleaning:	Tech services:	Additional services:
Breakroom:	Office services:	Business hub
Mail and ship:		Recycling and eco
Copy and print:		Staple easy system

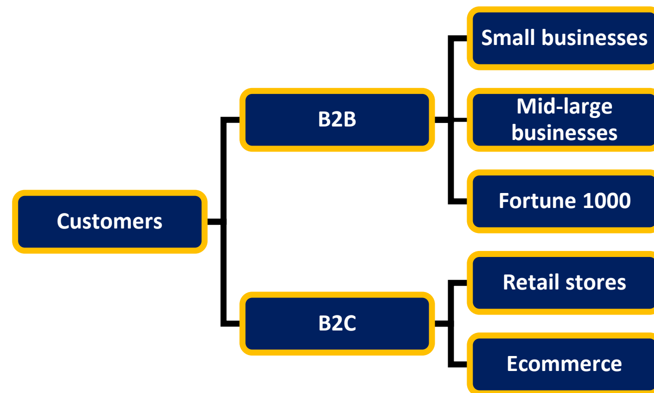
It is evident that Staples has expanded its product portfolio significantly to include products related to break room and cleaning. What is more important though, is that Staples has further expanded its operation to provide services closely related to its product portfolio. For instance, Staples offers copy and printing products, but also offers printing services. By offering services closely related to their products, Staples is capable of offering a fully integrated support system to their clients, especially other businesses. These adjacent services accounted for 9 % of the sales in 2016.
In addition to that, Staples provides memberships with certain benefits for their holders. Staples Plus, which is targeting smaller businesses, offers rewards on certain products, low prices for bestselling products and free next-day delivery with no minimum purchase amount. Staples Premium, advertising with the slogan *"More than a membership. A partnership",* is targeting mid-to-large businesses by offering them fully customized pricing programs, preferred partner discounts, 30-day invoicing and a dedicated account manager.

A more exhaustive list of products and services offered by Staples is provided in the appendix 2.

1.5.4.Customers

The customers of Staples range from businesses of all sizes in their B2B operation to both in-store and online customers in their B2C operation. Staples' customer base is quite diverse and comes in many different sizes. Their B2B segment provides products and services for small businesses (below 20 employees), mid-large businesses (between 20 and 1000 employees) as well as Fortune 1000 companies. Staples core customers would be considered to be mid-size businesses in North America with a need for office supplies and services. The B2C segment can be divided into retail stores and e-commerce.

Given that Staples is a retail company, the company serves as an end-market provider and is in direct contact with its end-customers. The way Staples tries to differentiate itself in terms of serving mid-market customers is through technology and innovation. With combining a personal touch through sales forces, digital selling tools and valuable data on the customer´s preferences Staples tries to differentiate itself from its competitors (Parry, 2016). The former CEO Shira Goodman described the usual situation with the mid-market customers as: *"These customers are often large enough that they have sophisticated needs, but too small to have the expertise or resources for all of their needs in-house." (*second-quarter earnings call 2016).



1.5.5.Distribution

As a retailing enterprise, Staples' distribution plays a vital role in their operation. In short, Staples purchases its products from several vendors worldwide and operates a network of delivery fulfillment centers. Moreover, they are also equipped with large distribution centers across the US in order to support their retail operation.

The fulfillment centers support the North American Delivery operation and are able to provide next-day delivery coverage to more than 95 % of the population in North America. Staples has further partnerships with vendors, providing products not on stock in the fulfillment centers.

The large distribution centers play a role of replenishing the majority of the U.S. retail store operation. These centers provide Staples with significant labor and merchandise cost savings and enable it to run as a centralized and efficient operation that can reduce in-store inventory requirements, which makes it easier to focus on customer service.

Staples also makes use of third-party vendors to support the wide variety of their products. This can, however, cause concerns for quality control and adds risk to the supply chains (Company Profile: Staples, Inc., MarketLine, 2018).

As of 2016, Staples operated 1255 physical stores worldwide and 78 distribution and fulfillment centers. Given their 20/20 strategy the operations in other countries outside of North America are to be considered either sold or registered as discontinued operation. Staples has a large coverage through their number and placement of stores, which also requires a large distribution network. For each center there are approximately 31 stores in the US and 22 in Canada. Also, Staples has stores in 47 states and respective centers in 25 of those. Appendix 3 provides an exhaustive list of Staples' retail stores and distribution center locations across the world.

1.5.6.Geography

Staples operates in the United States and Canada. With the implementation of the 20/20 strategy the company has sold off most of its international operations. Staples has stores in 47 states and in each province in Canada.

1.6.Sycamore Partners (sponsor)

Sycamore Partners is a private equity firm based in New York, founded in 2011 by Stefan Kaluzny and Peter Morrow. Sycamore specializes in retail, consumer goods and fashion sector investments across the U.S. The firm has approximately $10 billion in assets under management.

1.6.1.Business profile

Prior to Sycamore Partners, both Kaluzny and Morrow, worked at San Francisco based PE firm Golden Gate Capital, where they already managed several large retail deals, Kaluzny as a Managing Partner and Morrow as Principal. Like most PE firms, Sycamore Partners raises capital from third party investors, and aggregates it into private, pooled investment vehicles that are structured as limited partnerships. July 30, 2018 Sycamore Partners closed its third fund with $4.75 billion of limited partner capital committed. Their investor base is diversified and includes foundations, trusts, endowments, family offices, insurance companies, pension plans sovereign wealth funds, as well as high net worth individuals and institutions (Form ADV Part 2A: Firm Brochure, Sycamore Partner Management L.L.C., March 2014). Sycamore's main strategy is to partner with management and improve operating profitability and strategic value (Overview, sycamorepartners.com).

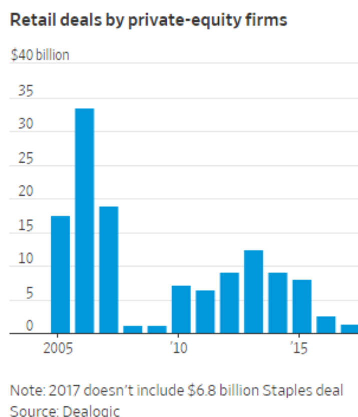
1.6.2.Sponsor type and target preferences

Sponsors vary greatly in terms of fund size, focus and investment strategy. Some focus on specific sectors, while others focus on specific situations, such as distressed companies, others are of a more general nature and have a broader scope (Rosenbaum and Pearl, 2013). In their firm brochure Sycamore states that it perceives their industry expertise as a major driver for high returns. Therefore, their focus in investing lies within fashion and apparel retail. Their portfolio covers a broad dimension of fashion and clothing companies, ranging from luxury to discount, pop culture inspired youth, plus size and sportswear. Sycamore can thus not be considered a generalist but rather a specific sponsor with focus on the retail sector. However, Sycamore has also begun to extend their knowledge in bordering sectors through opportunistic but low-risk investments. For example, investments into home décor, merchandising as well as multimedia and entertainment can also be found their current portfolio. While the big majority of their investments are retailers, meaning end-consumer businesses, some other complementing firms like manufacturers or sourcing companies are among them as well. Further, Sycamore states that it targets companies that seem to be underperforming due to identifiable, company-specific reasons, that are fixable within a timely manner, namely within the investment horizon. They pursue opportunities of buying companies and other assets at a discount, which they believe helps drive returns while also protecting them against principal loss. Their focus therefore lies on companies in distress, bankruptcy, carve-outs and companies operating in industries undergoing a lot of changes (Form ADV Part 2A: Firm Brochure, Sycamore Partner Management L.L.C., March 2014).

Appendix 4 and 5 feature a history as well as a list with all of Sycamore's previous investments, including detailed information on the target´s business descriptions, deal descriptions, deal value and motive. This will be helpful to outline Sycamore´s pursued investment strategy in the past and if it indeed matches the above stated criteria on how they prefer to choose a target.

The retail industry is a though one and has been under much pressure, with nine retail bankruptcies in 2017 alone (Thompson, 2017). Looking at the latest retail deals by private equity firms, there is a clear, decreasing

tendency, even though GDP has been growing for the last eight years, gas prices are low, and unemployment is under 5% (Thompson, 2017).



Nonetheless, Sycamore has made big investments into the retail industry over the past years, proving they believe in both their own capabilities and the future prospects of the retail industry.

1.6.3.Investment strategy

Sycamore has in general not disclosed a lot of information about their investment strategy, but through interviews with former executives of Sycamore's portfolio companies and documentation distributed to investors, the Wall Street Journal was able to put together what seems like Sycamore's general investment strategy. Usually they focus on finding new growth opportunities for the companies they buy. The strategy, however, is not straightforward and may change depending on the situation. In several cases, Sycamore bought struggling retailers and sold off their most valuable assets, while cutting down costs on the remaining company. Historical cost savings implementations by Sycamore included the closure of physical stores, a reduction of headcount and the narrowing down the product assortment (e.g. Talbots). The selling of valuable assets normally includes the selling of valuable brands, such as Stuart Weitzmann, Jones New York, Kurt Geiger and Torrid, or of liquid assets like credit card receivables (e.g. Talbots). At other times Sycamore was able to create value by owning more than just one company within the same supply chain. For example, one of Sycamore's portfolio companies is the sourcing and supply agent MGF Sources, which sources inventory to some of Sycamore's end-customer retail businesses. This way Sycamore benefits through the sourcing company even if the retailer is not able to sell its inventory (Khadeeja and Gottfried, 2018).
Based on the list of previous investments, it becomes also apparent that Sycamore sometimes likes to make changes to the top management team, like for example in the Talbot acquisition in 2012 and by replacing Staples´ CEO in 2017. At other times, Sycamore seems to support the existing management like in the case of Kurt Geiger's management buyout several other independent companies originating from the carve-out of The Jones Group. This indicates that Sycamore puts a lot of emphasis on capabilities of the operating management teams. All in all, the general impression of Sycamore´s investment strategy is that while the selection of the target companies may follow a pre-specified pattern, at least to some extent, the strategy that is eventually implemented is highly dependent on the situation.

At this point it seems only fitting to reference back to the previously described dimensions of value creation in an LBO, in order to relate Sycamores investment strategy into said framework. As already mentioned before, the value capturing is comprised of three different kinds of financial arbitrage. However, only the optimization of corporate scope seems relevant here, as both asymmetric information and superior deal making capabilities are too speculative and not enough information has been disclosed in the transactions in

order to make a valuable assessment. The optimization of corporate scope on the other hand is very relatable to Sycamore‘s previous investments, as The Jones Group was carved-out into six independent companies and also Staples will be carved-out into two independent companies. This proves that Sycamore believes in potential value creation through carve-out operations. This also includes carving a company into pieces, improving and selling the valuable pieces and considerably cutting down on pieces deemed not valuable. Taking the carve-out of The Jones Group, which resulted in Nine West Holdings, one of the carved-out companies, shutting down parts of the e-commerce site, reduce workforce and close nearly all stores. Further had the company been allocated more than $1.5 billion of debt after the buyout, resulting in Sycamore writing down its equity stake by nearly 88% to $13 million. Nonetheless, Sycamore still expects a return four times the loss on Nine West Holdings with the selling of the other brands carved-out (Khadeeja and Gottfried, 2018).

Primary levers of value creation include financial engineering, which seems not the be to the main focus of value creation for Sycamore, but as they're becoming a well-known player on the market, it gives them advantages regarding potential of improving debt structures and optimize the capital components of a deal. The main focus of value creation is however on both operational effectiveness and strategic distinctiveness. The acquisition of Belk, Inc. is a good example for understanding how Sycamore might manage Staples, as it was a big transaction in a similar industry. Not much has changed for the shoppers but considerable actions have been made behind the curtain. This included layoffs, reallocation of working hours, closing of underperforming stores, consolidating the headquarter, expanding its private label offerings, new delivery options, improvements to the online sales channel, as well as replacing the CEO in 2016 with the former CEO of Hot Topic, another portfolio company of Sycamore (Peralta, 2018). The new CEO, however, had little experience within the department store industry but a lot of experience with merchandise and building assortments for customers, which fits together with the increase in private label offerings. This has boosted revenue and private label expansion is happening all over the retail business according to Roger Beahm, executive director of the center for Retail Innovation at Wake Forest University. These initiatives prove that Sycamore partners focuses on operational effectiveness through cost-cutting as well as margin improvements initiatives like layoffs, reducing capital requirements through the closing down of underperforming stores, and the removal of managerial inefficiencies by replacing the CEO. Also, strategic distinctiveness has been expressed through the assigning of a CEO with experience from another industry, indicating a redefinition of the company´s strategy.

Secondary levers of value creation included the reduction of agency cost. However, this topic will not be considered here as it is of a too speculative nature. The parenting effect on the other hand has been seen with Sycamore shifting a CEO between portfolio companies and acting as an intermediate level between other portfolio companies. But, in general, Sycamore dies not intervene in the day-to-day operational decisions. Instead it prefers to hire consultants and veteran retail executives (Khadeeja and Gottfried, 2018). To bring the other two dimensions into the play as well, Sycamore is active in all three phases of a buyout and makes use of both intrinsic and extrinsic sources of value generation. These are very important factors to have in place, in regard to forecasting the future financial performance of Staples.

1.6.4.Track record

It was previously mentioned that Sycamore has become a well-known player in the PE sector. Sycamore has been delivering spectacular returns. The first fund of $1 billion, raised in 2012, posted annualized returns of 43% after fees according to fund documents, compared to the 19% returns after fees generated by similar buyout funds (Khadeeja and Gottfried, 2018). Further, Sycamore is described as "*The best of the bunch in the retail sector*" by Craigh Johnson, President of Customer Growth Partners.

1.6.5.Management

The managing director, Stefan Kaluzny, is an alumnus of consulting firm Bain & Co. and has degrees from both Yale and Harvard Business School. He started in retail running Delray Farms, a grocery chain and in 2000 joined San Francisco-based Golden Gate Capital. He was able to make a name for himself in private equity through lucrative deals, including a 22% stake in the diamond seller Zale Corp. at a discount to its current stock price. The stake was sold off to Signet Jewelers Ltd. for $1.4 billion four years later (Khadeeja and Gottfried, 2018). In 2011, Mr. Kaluzny founded Sycamore with a colleague, Peter Morrow, taking some of the Golden Gate´s retail and consumer team with him. His former colleagues and rivals describe him as magnetic, sometimes hotheaded, with a preternatural understanding of the ins and outs of the retailing business (Carey and Coleman-Lochner, 2017). George Hopkins, executive director of the Arkanses Teach Retirement System, told *"I was ashamed when I walked out of that room about how little I knew about the retail space"* after a meeting with Kaluzny (Khadeeja and Gottfried, 2018).

All in all, Sycamore has both a proven track record and management, with a diverse and successful investment strategy. Below is an overview of Sycamores value creation levers provided.

Sycamore Partners - Value creation levers

	Phases			Causes			Sources	
				Value	Value Creation			
Levers	Acqusitions	Holding	Disvestment	Capturing	Primary	Secondary	Intrinsic	Extrinsic
Financial arbitrage								
Market valuation								
Private information								
Superior market information								
Superior deal making capabilities								
Optimization of corporate scope	X	X		X				X
Financial								
Optimizing capital structure	X				X			X
Reducing corporate tax								
Increasing operation								
Cost cutting & margin improvements	X	X			X		X	X
Reducing capital requirements	X	X			X		X	X
Removing managerial inefficiencies	X	X			X		X	X
Increasing strategic								
Corporate refocusing	X	X			X		X	X
Buy and build strategies								
Reducing of agency								
Reducing agency cost of FCF								
Improving incentive alignment								
Improving monitoring and controlling								
The parenting								
Restoring entrepreneurial spirit								
Advising and enabling	X	X				X		X

PART 2
2.1.Valuation types

To evaluate whether Sycamore partners paid a reasonable price for Staples, more than one valuation method is required in order to provide a more complete assessment. The methods used include a comparable valuation, a precedent valuation, a discounted cash flow model and a leveraged buyout model. Each method comes with several strengths and weaknesses, which can be found in the list below.

Comparable valuation	
Pros	**Cons**
Reflects market´s expectations	Skewed market-based data
Reference point to other sectors	Difficult to select true comparables
Simple	Potential disconnet from DCF
Reflect current conditions	Company-specific issues
Precedent valuation	
Pros	**Cons**
Reflects market´s expectations	Skewed market-based data
Reference point to other sectors and periods	Time lag
Simple	Difficult to select true comparables transactions
Reflect current conditions	Lack of available data
Objective - avoids assumptions	Buyer´s expectations
Discounted cash flow	
Pros	**Cons**
Reflects projected FCF	Dependenc on financial projections
Insulated from market aberrations	Terminal value
Self-sufficent	Assumes constant capital structure
Flexible	Sensitivity to assumptions
Leverage buyout	
Pros	**Cons**
Reflects projected FCF	Dependenc on financial projections
Insulated from market aberrations	Account for time-value of money
Self-sufficent	Reliance on multiples
Flexible	Sensitivity to assumptions

The pros of the comparable valuation include market-based information reflecting growth potential and risk exposure. This method can also work as a reference point to other sectors and reflects prevailing market data which is easily updated. The cones are represented by potentially skewed market data which can be affected by the general market condition. The very foundation of the method also relies on the availability of true comparable companies. Last can this valuation approach fail to capture target-specific factors. The precedents valuation shares a lot of the same pros and cons with the comparable valuation. The precedent does however also provide a historical based valuation, mitigation the need for assumptions about the future performance of the company. This does however also provide a con, as past transaction might not truly reflect current market conditions. Further can the limit information about the transactions result in insufficient data to execute the valuation. The multiples will also represent the buyer´s expectations which is typically not disclosed. The discounted cash flow reflects projected FCF representing a more fundamental approach and is further market independent. Further does the method not require other comparable companies or transactions and provide flexibility through allowing for different scenarios. The DCF does however rely on accurate forecasting which can be challenging and are also very sensitive to the given assumptions. The terminal value impact of value can also reduce the quality of the valuation by reducing the relevance of the projected FCF. Last does the DCF assume a constant capital structure with the use of WACC. The Leverage buyout shares a lot of the same pros and cons with the DCF. The LBO does however not account for the time-value of money and is heavily reliant on the multiples used.

2.2.Comparable valuation

A comparable valuation provides a market benchmark for a certain company at a specific point in time. The very foundation of this valuation technique lies in the premise that other companies, which share key business and financial characteristics and similar performance drivers and risks, produce a reference point with which one can evaluate the company of interest (Rosenbaum and Pearl, 20132009). At the very center of this valuation method lies the selection of the comparable companies. These peers will provide financial ratios and trading ratios which will then provide the basis for extrapolating a valuation range for the target company. These firms need to be carefully selected, requiring a deep understanding of the target company.

2.2.1.Selection of comparable companies

To select the comparable companies, a business profile of the target company is required. The business profile of Staples has been outlined earlier on in the respective Staples section and includes information regarding the sector, products and services, customers, distribution channels and geography of Staples.

Business profile: Staples				
Sector	**Product and services**	**Customers**	**Distribution**	**Geography**
Sector: Disbribution	**Products:** Office supplies, electronics, furniture, other office related	**B2C:** Online and in-stores	**Suppliers:** Several vendors	**USA:** 47 states
Industry group: Retail stores	**Additional:** Finance center and additional services	**B2B:** Mid-size businesses	Next day delivery coverage, 95% NA	**Canada:** Each province
Industry: Miscellaneous store retailers		End-market and end-customers	Distribution support centers	
Sub-industry: Office supplies				

Establishing distinctive characteristics about Staples will serve as a good guidance for the screening of potential comparable companies.

2.2.2.Screening for comparable companies

Based on the sector and sub-sector specifications, the characteristics of Staples' products and services and the kind of customers they are aimed at, make it possible to search for suitable peers. Through a thorough search, combined with information from the definitive proxy statement and industry reports, a suitable list of comparable firms was produced. Most of the comparable firms are extracted from the definitive proxy statement where financial advisors selected public traded companies within the distribution and retail industry that they deemed similar to Staples´ current operational position. Further, an industry report analyzing Staples, provided by Marketline, outlined Staples´ top competitors, of which most were confirmed through annual reports statements. Given that most of the comparable firms selected for the valuation are identical to those Sycamore Partners used to valuate Staples, represents both an advantage and a disadvantage. The upside being that the valuation will be based on the same firms, thus making the output more comparable to Sycamore´s valuation. However, the downside is the chance of the valuation being highly biased towards the same valuation range produced by Sycamore. Adding the top competitors to the comparable valuation it will offer a wider range of options for the valuation range and give an insight into how Staples relates to its closest competitors. Even though the top competitors may not share a lot of Staples´ distinctive characteristics, their inclusion in the analysis will help benchmarking Staples to future and present competitors.

2.2.3.Selected companies

($ in millions)

List of comparable companies						
Selected comparable companies						
Company	**Ticker**	**Business description**	**Equity Value**	**Enterprise Value**	**LTM Sales**	**LTM EBITDA**
Apple, Inc.	AAPL	Designs, manufactures and markets mobile communication and media devices, personal computers and portable digital music players.	$788,522	$859,815	3.8x	12.2x
Amazon.com, Inc.	AMZN	One of the worlds largest online retailer. Engages in retail sale of consumer products and subscriptions in NA and internationally.	$500,840	$495,320	3.3x	29.7x
Wal-Mart Stores, Inc.	WMT	One of the worlds largest retailer of consumable goods and general mechandise	$242,144	$272,038	0.6x	8.2x
The Home Depot, Inc.	HD	World largest home improvement specialty retailer.Offer numerous building materials, home improvement products, lawn and garden products, and decor products.	$177,252	$196,844	2.0x	12.2x
Costco Wholesale Corporation	COST	One the world´s largest retailer which operates with membership warehouses and sell merchandise at lower prices	$67,415	$80,220	0.6x	14.6x
FedEx Corporation	FDX	Provide a portfolio of transportation, e-commerce and business services.	$56,587	$68,221	1.1x	8.6x
Target Corporation	TGT	General merchandise retailer selling products through stores and digital channels. Offers food assortment, including perishables, dry grocery, dairy and frozen items.	$33,402	$42,003	0.6x	5.2x
Best Buy Co., Inc.	BBY	Provides technology products, services and solutions through its stores and digital channels.	$17,915	$17,860	0.4x	7.2x
Cintas Corporation	CTAS	Provides corporate identity uniforms through rental and sales programs, as well as a provider of related business services	$14,529	$16,871	3.0x	15.0x
GENUINE PARTS COMPANY	GPC	Service organization engaged in the distribution of automotive replacement parts, industrial replacement parts, office products and electrical/electronic materials.	$12,439	$12,786	0.8x	10.4x
W.W. Grainger, Inc.	GWW	Distributor of maintenance, repair and operating (MRO) supplies and other related products and services. The Company offers its products and services to businesses and institutions.	$9,706	$11,823	1.2x	8.7x
Xerox Corporation	XRX	Provider of digital print technology and related solutions. The Company has capabilities in imaging and printing, data analytics, and the development of secure and automated solutions to help	$7,799	$11,038	1.1x	6.4x
HD Supply Holdings, Inc.	HDS	Industrial distributor in North America. Offers mainly products related to facilicty maintenance and constrcution.	$6,503	$10,474	1.4x	11.6x
Pool Corp	POOL	Distributor of swimming pool supplies, equipment and related leisure products. The Company is a distributor of irrigation and landscape products in the United States.	$4,648	$5,159	1.9x	17.6x
Bed, Bath and Beyond Inc.	BBBY	Retailer, which operates under the names Bed Bath & Beyond (BBB), Christmas Tree Shops, Christmas Tree Shops or andThat!. Sells a range of domestics merchandise and home furnishings.	$4,136	$5,269	0.4x	4.2x
MSC Industrial Direct Co	MSM	North American distributor of metalworking and maintenance, repair and operations (MRO) products and services	$4,119	$4,304	1.5x	9.0x
Dick's Sporting Goods, Inc.	DKS	Omni-channel sporting goods retailer offering an assortment of sports equipment, apparel, footwear and accessories in its specialty retail stores primarily in the eastern United States.	$3,985	$4,040	0.5x	5.1x
Office Depot, Inc.	ODP	Provides a selection of products and services to consumers and businesses of various sizes. Offers products and services in various categories, such as supplies, technology, and furniture and other.	$3,064	$3,435	0.3x	5.4x
GameStop Corp.	GME	Omnichannel video game retailer. Sells video game hardware, physical and digital video game software, video game accessories, as well as mobile and consumer electronics products.	$2,180	$2,734	0.3x	4.0x
Barnes & Noble, Inc.	BKS	Content and commerce company, which provides access to trade books and other content across its multi-channel distribution platform.	$594	$666	0.2x	3.3x
Essendant, Inc.	ESND	Wholesale distributor of workplace items. Product portfolio includes Foodservice and Breakroom Supplies, Technology Products, Traditional Office Products, Industrial Supplies and Office Furniture.	$434	$915	0.2x	7.0x

Above, all 21 firms used for the comparable valuation are listed with both business description extracted from Reuters, equity and enterprise value computed based on the annual reports as well as LTM sales and LTM EBITDA. Going through the business description it becomes clear that many firms do differ significantly from Staples. Havin to use less comparable firm in the valuation might be considered problematic in regard to extrapolating a valuation range for the target company. However, the comparable valuation does not require all selected firms to be directly used in determining an appropriate value range. The selected firms will provide a valuable insight, both as aggregate groups and for the general market condition. The bigger differences in size will also result in a wider range of multiples, as size of a company not only reflects different stages in the company´s life but also different operations. Again, not every single selected firm will be directly used in determining the value range but will help give a more extensive assessment of Staples´ position.

2.2.4.Data of the comparable companies

Locating necessary financial information

The primary source of information and data were SEC filings, such as 10-Ks, 10-Qs and the likes. The annual reports and quarterly report data have been extracted from either company information sources or the sec.gov webpage. Data used from these reports include income statement data, balance sheet data, cash flow data and share data, such as fully diluted shares outstanding. Market data was extracted from Yahoo Finance and Reuters. Estimated earnings projections were extracted from 4-traders.com and proxy statements.

Key statistics, ratios and trading multiples

Having chosen comparable companies and extracted necessary data, each company will have to undergo certain adjustments in order to calculate key statistics, ratios and trading multiples. Putting these together will provide an insight into different aspects of each firm. These aspects can be separated into different categories: Size, profitability, growth, return on investment and credit profile. Said statistics and ratios will help benchmark Staples towards its peers and evaluate the selected firms in terms of their individual resemblance to Staples. Having this information will help guide towards determining the value range and further give valuable information, which will help with the fundamental analysis.

Size

The size of the company will be based on the equity and enterprise value. These measures will provide information on the relative size of the company. Equity value is calculated by share price times fully diluted shares outstanding. Fully diluted shares outstanding is comprised of basic shares outstanding, in-the-money options and warrants as well as in-the-money convertible securities. Average diluted shares outstanding for each period were extracted directly from the annual and quarterly reports. Other approaches would have been more accurate but for simplistic reasons this approach was chosen instead. Said other approaches would have included the treasury stock method for calculating in-the-money options and warrants. This method calculates the in-the-money options and warrants based on their average-weighted strike price where the proceeds from the options will be used to repurchase outstanding shares at the current share price (Rosenbaum and Pearl, 2013). The in-the-money convertible can be calculated based on the if-converted method, where in-the-money converts are converted into additional shares. This is done by dividing the convert´s amount outstanding by its conversion price (Rosenbaum and Pearl, 2013). Enterprise value represents the firm value or the sum of all ownership interests, which includes both debt and equity. Enterprise value equals equity value, total debt, preferred stock, and non-controlling interest minus cash and cash equivalents. Further, the current share price as a percentage of its 52-week high is calculated. This percentage number provides a market-based perception of the current market sentiment and outlook for the individual company.

Last twelve months (LTM)

Further, financial data such as sales, gross profit, EBITDA, EBIT and net income are also extracted from the reports. These financial numbers have been adjusted to represent the last twelve months prior to the transaction date. With the selected firms having different fiscal year endings this adjustment is necessary in order to make the data comparable in terms of time. For instance, Barnes & Noble, Inc.'s financial year ends around the ending of April, while the Staples deal was completed at the end of June, therefore making a direct comparison impossible. The LTM calculations of the income statement items is thus based on the prior fiscal year, the 2017/2016 annual report, plus the first quarter of 2017 minus the first quarter of 2016.

Non-recurring items

Adjustments for non-recurring items are also necessary to assess the financial performance and be able to compare it. This is done in order to avoid misleading ratios and multiples that are either overstated or understated because of non-recurring items. Typical non-recurring item charges are restructuring events, losses on asset sales, changes in accounting principles, inventory write-offs, goodwill impairment, extinguishment of debt as well as losses from litigation settlements. Typical non-recurring items benefits are gains from asset sales, favorable litigation settlements and tax adjustments (Rosenbaum and Pearl, 2013). The non-recurring items are extracted from the public filings such as annual and quarterly reports, which are often disclosed in either footnotes or other notes describing line items. When adjusting for non-recurring items, an assessment of whether the items are non-recurring or part of the normal operation is necessary. A good indicator for non-recurring items, besides bearing resemblance to the previous described typical non-recurring items, is the recurrence and stability of the item. Another aspect of adjusting worth mentioning is whether the adjustment is pre-tax or after-tax. Adjusting EBIT and EBITA for pre-tax amounts either adds or subtracts the item. Adjusting net income for pre-tax amounts, requires the amount to be tax-affected by the marginal tax rate. Conversely, after-tax amounts are simply added or subtracted back to net income, while pre-tax amounts are mostly grossed up at the company´s marginal tax rate when added or subtracted to EBIT or EBITDA. To name an example, the adjustments to Dick's Sporting Goods, Inc.'s 2016 annual report includes a pre-tax adjustment to gross profit of $46.4 mil, which is due to a write-down on inventory in connection with the company´s implementation of a new merchandising strategy. In addition to that, EBIT was adjusted for impairments on store assets as well as store closing charges, merger and integration charges and a non-cash impairment charge in order to reduce the carrying value of a corporate aircraft held for sale to its fair market value, totaling to $49.1 million. Since all of these are pre-tax adjustments to pre-tax financials no tax adjustments were necessary. The net income was further adjusted by $14.4 million, including deferred compensation plan investment values, benefit from a multi-year sales tax refund and gain for liquidation of stores. As this adjustment benefit is a pre-tax non-recurring item, a tax adjustment needs to be made, together with the pre-tax adjustments to both gross-profit and EBIT. The total pre-tax adjustments are $46.4 million plus $49.1 million, minus $14.4 million, totaling to $81.1 million in pre-tax adjustments to net income. It is worth mentioning that charges are added and not subtracted, considering that they are expenses already included in the report numbers, leading to a lower report number. Thus, adjusting for them means that they have to be added back. The same concept applies to benefits, which consequently have to be subtracted from the report numbers. The total amount of the pre-tax adjustments is then multiplied with the marginal tax rate of 37.3 %, which gives $30.2 million. This tax adjustment is subtracted from the reported income to account the pre-tax non-recurring items.

Profitability is expressed through margins such as gross profit margins, EBITDA margins, EBIT margins and net income margins. These margins are based on the adjusted financial data. Growth is either expressed through a historical one-year growth rate or a two-year CAGR and estimates the future one-year growth rate or two-year CAGR. Return on investment is measured by ROIC, ROE, ROA and implied dividend yield. The credit profile is expressed through the use of leverage and coverage ratios.

Trading multiples

The trading multiples are used to determine the value range and can in general be divided into either equity value multiples or enterprise multiples. Given that the transaction is a leveraged buyout, which usually requires the acquirer to not only acquire the equity but also the debt, the main focus will be on enterprise multiples, as they account for both. The enterprise multiples are based on unlevered financial statistics such as sales, EBITDA and EBIT. These statistics are independent of capital structure and taxes. The most popular enterprise multiple is EV to EBITDA. The reason for EBITDA being preferred over EBIT is that EBIT can be distorted by differences in D&A among different companies (Rosenbaum and Pearl, 2013). This could imply either different depreciation approaches or investment cycles. Others argue that multiples based on EBITA

are more appropriate, as the depreciation is a rough proxy for the deterioration of assets and should count as an operating expense. One can understand depreciation as an equivalent of setting aside future capital expenditures that will be required to replace the assets. Thus, subtracting such an expense will represent the operations better (Koller et al., 2015). Nonetheless, amortization of intangible assets won't be subtracted, as that would distort the numbers and overstate companies that have grown organically and don't record additional amortization on acquired intangible assets. For the sake of simplicity and making it possible to compare Sycamore´s own value ranges, the EV to EBITDA multiple was chosen for this valuation.

2.2.5.Benchmark of comparable companies

By making a comparable valuation, a list of comparable firms was produced. The selection process has been discussed in more detail earlier on. In short, the list comprises companies that either operate in the retail industry or distribution industry or that are considered a top competitor to Staples. There were adjustments made for non-recurring items and accounting practice changes. Further, the LTMs are calculated on the basis of Staples transaction date, which was June 2017.

Staples Inc.
Benchmarking analysis - Financial Statistics and Ratios
($ in millions, except per share date)

		Market Valuation		LTM Financial Statistics					LTM profitability Margins				Growth Rates			
Company	Ticker	Equity Value	Enterprise Value	Sales	Gross Profit	EBITDA	EBIT	Net Income	Gross Profit (%)	EBITDA (%)	EBIT (%)	Net Income (%)	Sales Hist. 1-year	Sales Est. 1-year	EBITDA Hist. 1-year	EBITDA Est. 1-year
Staples inc.	**SPLS**	**$6,766**	**$6,618**	**$17,908**	**$4,695**	**$1,069**	**$680**	**$718**	**26%**	**6%**	**4%**	**4%**	**-3%**	**-5%**	**-20%**	**7%**
Tier I: Retail Industry																
Best Buy Co., Inc.	BBY	$17,915	$17,860	$39,895	$9,408	$2,482	$1,826	$1,205	24%	6%	5%	3%	0%	0%	14%	-5%
Dick's Sporting Goods, Inc.	DKS	3,985	4,040	8,276	2,510	788	582	368	30%	10%	7%	4%	9%	8%	-5%	1%
Bed, Bath and Beyond Inc.	BBBY	4,136	5,269	12,168	4,505	1,255	957	565	37%	10%	8%	5%	1%	1%	-16%	0%
Office Depot, Inc.	ODP	3,064	3,435	10,601	2,601	641	478	620	25%	6%	5%	6%	-6%	-7%	-6%	-6%
GameStop Corp.	GME	2,180	2,734	8,738	3,042	691	530	341	35%	8%	6%	4%	-8%	7%	-13%	-5%
Barnes & Noble, Inc.	BKS	594	666	3,834	1,188	200	85	37	31%	5%	2%	1%	-6%	0%	9%	-6%
Mean		**$5,312**	**$5,667**	**$13,919**	**$3,876**	**$1,009**	**$743**	**$523**	**30%**	**8%**	**5%**	**4%**	**-2%**	**2%**	**-3%**	**-4%**
Median		**$3,525**	**$3,738**	**$9,670**	**$2,822**	**$739**	**$556**	**$466**	**31%**	**7%**	**5%**	**4%**	**-3%**	**1%**	**-6%**	**-5%**
Tier II: Distribution Industry																
Cintas Corporation	CTAS	$14,529	$16,871	$5,668	$2,543	$1,121	$899	$569	45%	20%	16%	10%	11%	0%	12%	-8%
Genuine Parts Company	GPC	12,439	12,786	15,728	4,725	1,230	1,076	681	30%	8%	7%	4%	0%	6%	-4%	20%
W.W. Grainger, Inc.	GWW	10,223	11,823	10,223	4,089	1,356	1,092	560	40%	13%	11%	5%	2%	3%	-10%	2%
HD Supply Holdings, Inc.	HDS	6,503	10,474	7,548	2,579	901	800	429	34%	12%	11%	6%	4%	-31%	0%	-20%
Pool Corp	POOL	4,648	5,159	2,671	771	293	269	164	29%	11%	10%	6%	9%	8%	19%	11%
MSC Industrial Direct Co., Inc.	MSM	4,119	4,304	2,888	1,286	476	413	253	45%	16%	14%	9%	1%	11%	0%	3%
Essendant Inc.	ESND	434	915	5,192	727	131	87	50	14%	3%	2%	1%	0%	-6%	-16%	n/a
Mean		**$7,556**	**$8,905**	**$7,131**	**$2,389**	**$787**	**$662**	**$387**	**34%**	**12%**	**10%**	**6%**	**4%**	**-1%**	**0%**	**2%**
Median		**$6,503**	**$10,474**	**$5,668**	**$2,543**	**$901**	**$800**	**$429**	**34%**	**12%**	**11%**	**6%**	**2%**	**3%**	**0%**	**2%**
Tier III: Top Competitors																
Apple Inc	AAPL	$788,522	$859,815	$223,507	$86,068	$70,206	$59,985	$46,651	39%	31%	27%	21%	-8%	6%	-14%	1%
Amazon.com, Inc.	AMZN	500,840	495,320	150,124	54,015	16,701	7,253	4,180	36%	11%	5%	3%	27%	31%	43%	30%
Wal-Mart Stores Inc	WMT	242,144	272,038	485,401	120,965	33,005	22,661	13,352	25%	7%	5%	3%	1%	4%	-3%	1%
The Home Depot, Inc.	HD	177,252	196,844	97,356	33,210	16,106	14,096	8,423	34%	17%	14%	9%	7%	0%	12%	0%
Costco Wholesale Corporation	COST	126,172	14,290	126,172	14,290	5,481	4,111	2,679	11%	4%	3%	2%	9%	2%	11%	-1%
FedEx Corporation	FDX	56,587	68,221	60,953	39,204	7,897	4,890	2,878	64%	13%	8%	5%	20%	0%	30%	5%
Target Corporation	TGT	33,402	42,003	69,577	20,701	8,094	5,556	3,286	30%	12%	8%	5%	-6%	0%	-9%	-8%
Best Buy Co, Inc.	BBY	17,915	17,860	39,895	9,408	2,482	1,826	1,205	24%	6%	5%	3%	0%	0%	14%	-5%
Xerox Corporation	XRX	7,799	11,038	10,384	7,851	1,727	1,182	766	76%	17%	11%	7%	-6%	-5%	-8%	2%
Office Depot, Inc.	ODP	3,064	3,435	10,601	2,601	641	478	620	25%	6%	5%	6%	-6%	-7%	-6%	-6%
Mean		**$195,370**	**$198,086**	**$127,397**	**$38,831**	**$16,234**	**$12,204**	**$8,404**	**36%**	**12%**	**9%**	**6%**	**4%**	**3%**	**7%**	**2%**
Median		**$91,379**	**$55,112**	**$83,467**	**$26,956**	**$7,996**	**$5,223**	**$3,082**	**32%**	**11%**	**6%**	**5%**	**0%**	**0%**	**4%**	**1%**
Overall																
Mean		**$88,629**	**$90,313**	**$61,191**	**$18,621**	**$7,561**	**$5,701**	**$3,908**	**34%**	**11%**	**8%**	**6%**	**2%**	**1%**	**2%**	**0%**
Median		**$10,223**	**$11,823**	**$10,601**	**$4,505**	**$1,255**	**$1,076**	**$620**	**31%**	**10%**	**7%**	**5%**	**1%**	**0%**	**-3%**	**0%**
High		**$788,522**	**$859,815**	**$485,401**	**$120,965**	**$70,206**	**$59,985**	**$46,651**	**76%**	**31%**	**27%**	**21%**	**27%**	**31%**	**43%**	**30%**
Low		**$434**	**$666**	**$2,671**	**$727**	**$131**	**$85**	**$37**	**11%**	**3%**	**2%**	**1%**	**-8%**	**-31%**	**-16%**	**-20%**

Starting with the market valuation section, equity value is based on the share price as of June 28, 2017 times the fully diluted number of shares reported from closest quarterly report. Enterprise value is the equity value plus total debt, preferred stock and non-controlling interest less cash and cash equivalents. Compared to both the distribution and retail sector, Staples equity and enterprise value is not far off from the mean,

making both tiers the most comparable in terms of size. The same goes for the LTM financial statistics. The third tier is skewed towards much higher numbers because of the numbers of certain competitors such as Apple, Amazon and Wall-mart. In terms of size Bed, bath and beyond is the most comparable to Staples in the retail tier.

The profitability margins, where all accounts are adjusted for non-recurring items, shows that Staples is struggling to match its peers, especially in regard to the gross profit and EBITDA margins. This could indicate that Staples has room for improving their profitability through either sales increases or cost reductions. The closest peers in terms of margins are Office Depot and Best Buy. The differences in the margins do, however, not reflect the whole picture, as the difference also accounts for the different business models and environments.

The growth rates are both historical and estimates taken from reports (4-traders). Looking at the historical growth rates it becomes clear that Staples is having issues with growth, especially considering the -20 % historical growth rate in EBITDA. The future growth estimates, however, are very optimistic compared to those of the other peers, both in the distribution and the retail sector. The optimistic future growth might be highly affected by previous years with negative growth though. What also becomes evident is the volatility of Staples' growth rate. Looking at the retail tier as a whole, the estimated growth rate median of EBITDA is -5%, giving an indication that investors don't have a too optimistic view on the general retail industry. In terms of growth Staples' closest peer is Office depot.

Staples Inc.

Benchmarking analysis - Financial Statistics and Ratios

($ in millions, except per share date)

Company	Ticker	FYE	Beta	ROIC (%)	ROE (%)	ROA (%)	Implied Div. Yield (%)	Debt / Tot.Cap. (%)	Debt / EBITDA (x)	Net Debt / EBITDA (x)	EBITDA / Int. Exp. (x)	EBITDA - CPX/ Int. (x)	EBIT / Int. Exp. (x)
		General		Return on investment				LTM Leverage ratios			LTM Coverage ratios		
Staples inc.	**SPLS**	**Dec. 31**	**N/A**	**23%**	**20%**	**9%**	**5%**	**13%**	**0.5x**	**-0.6x**	**25.5x**	**18.5x**	**16.2x**
Tier I: Retail Industry													
Best Buy Co., Inc.	BBY	Feb. 3	0.97	45%	27%	9%	2%	23%	0.5x	0.0x	70.9x	39.4x	52.2x
Dick's Sporting Goods, Inc.	DKS	Feb. 3	0.39	31%	19%	9%	2%	9%	0.2x	0.1x	119.6x	35.2x	88.3x
Bed, Bath and Beyond Inc.	BBBY	Feb. 25	0.98	25%	21%	8%	2%	35%	1.2x	0.9x	17.7x	12.6x	13.5x
Office Depot, Inc.	ODP	Dec. 30	2.57	21%	32%	11%	2%	36%	1.8x	0.6x	10.2x	8.3x	7.6x
GameStop Corp.	GME	Jan. 28	1.42	20%	15%	7%	7%	26%	1.2x	0.8x	12.0x	9.9x	9.2x
Barnes & Noble, Inc.	BKS	Apr. 29	1.04	14%	7%	2%	9%	13%	0.4x	0.4x	25.3x	13.4x	10.7x
Mean			**1.23**	**26%**	**20%**	**8%**	**4%**	**24%**	**0.9x**	**0.4x**	**42.6x**	**19.8x**	**30.3x**
Median			**1.01**	**23%**	**20%**	**8%**	**2%**	**25%**	**0.9x**	**0.5x**	**21.5x**	**13.0x**	**12.1x**
Tier II: Distribution Industry													
Cintas Corporation	CTAS	May 31.	0.93	18%	23%	8%	1%	50%	2.3x	2.1x	11.0x	8.5x	8.8x
Genuine Parts Company	GPC	Dec 31.	1.13	30%	21%	7%	3%	14%	0.4x	0.3x	70.2x	39.8x	61.4x
W.W. Grainger, Inc.	GWW	Dec. 31	0.64	31%	32%	10%	3%	57%	1.7x	1.5x	18.7x	14.4x	15.0x
HD Supply Holdings, Inc.	HDS	Jan. 29	1.33	16%	41%	7%	0%	78%	4.5x	4.4x	4.2x	3.8x	3.8x
Pool Corp	POOL	Dec. 31	0.74	38%	65%	14%	1%	64%	1.8x	1.7x	19.4x	16.2x	17.8x
MSC Industrial Direct Co., Inc.	MSM	Sep. 2	0.57	59%	21%	12%	2%	14%	0.4x	0.4x	38.5x	34.7x	33.4x
Essendant Inc.	ESND	Dec. 31	0.66	7%	7%	2%	5%	46%	3.8x	3.7x	5.1x	3.9x	3.4x
Mean			**0.86**	**28%**	**30%**	**9%**	**2%**	**46%**	**2.1x**	**2.0x**	**23.9x**	**17.3x**	**20.5x**
Median			**0.74**	**30%**	**23%**	**8%**	**2%**	**50%**	**1.8x**	**1.7x**	**18.7x**	**14.4x**	**15.0x**
Tier III: Top Competitors													
Apple Inc	AAPL	Sep 24.	1.10	31%	36%	14%	1%	40%	1.3x	1.0x	33.3x	12.5x	28.5x
Amazon.com, Inc.	AMZN	Dec. 31	1.72	57%	20%	5%	0%	25%	0.5x	-0.3x	31.3x	15.9x	13.6x
Wal-Mart Stores Inc	WMT	Jan. 31	0.46	22%	17%	7%	3%	31%	1.0x	0.8x	14.5x	8.7x	9.9x
The Home Depot, Inc.	HD	Jan. 29	1.07	60%	214%	19%	2%	87%	1.5x	1.2x	15.9x	14.2x	13.9x
Costco Wholesale Corporation	COST	Sep 03.	1.06	31%	24%	7%	1%	96%	1.2x	0.4x	40.9x	16.9x	30.7x
FedEx Corporation	FDX	May. 31	1.52	18%	18%	6%	0%	48%	1.9x	1.5x	15.4x	5.1x	9.5x
Target Corporation	TGT	Jan. 28	0.56	28%	30%	9%	4%	50%	1.3x	1.1x	14.5x	10.8x	9.9x
Best Buy Co, Inc.	BBY	Feb. 3	0.97	45%	27%	9%	2%	23%	0.5x	0.0x	70.9x	39.4x	52.2x
Xerox Corporation	XRX	Dec. 31	1.15	15%	15%	4%	1%	45%	2.5x	1.7x	13.4x	12.5x	9.2x
Office Depot, Inc.	ODP	Dec. 30	2.57	21%	32%	11%	2%	36%	1.8x	0.6x	10.2x	8.3x	7.6x
Mean			**1.22**	**33%**	**43%**	**9%**	**2%**	**48%**	**1.3x**	**0.8x**	**26.0x**	**14.4x**	**18.5x**
Median			**1.09**	**30%**	**25%**	**8%**	**2%**	**43%**	**1.3x**	**0.9x**	**15.7x**	**12.5x**	**11.8x**
Overall													
Mean			**1.11**	**30%**	**33%**	**9%**	**2%**	**41%**	**1.5x**	**1.1x**	**29.7x**	**16.7x**	**22.2x**
Median			**1.04**	**28%**	**23%**	**8%**	**2%**	**36%**	**1.3x**	**0.8x**	**17.7x**	**12.6x**	**13.5x**
High			**2.57**	**60%**	**214%**	**19%**	**9%**	**96%**	**4.5x**	**4.4x**	**119.6x**	**39.8x**	**88.3x**
Low			**0.39**	**7%**	**7%**	**2%**	**0%**	**9%**	**0.2x**	**-0.3x**	**4.2x**	**3.8x**	**3.4x**

The levered betas are extracted from Yahoo finance and Reuters and show how the individual firm´s volatility correlates with the market. The median of the retail tier shows that the peers of Staples have almost the exact same volatility as the market. Office depot, however, is an outliner, having the highest beta. This means that they are subject to a much higher volatility than the market. Looking at the closest peers, Office depot and the rest of the retail tier, Staples mostly has operation slightly more volatile than the market. Following NYU Stern's betas by industry in the US as of January 5, 2016 the beta for retail (special lines) lies at 1.07, which suggests that the betas of both the retail tier and the top competitor tier have the most accurate beta median.

The return on invested capital is a measure of the return on all the capital provided to a company. The numerator is a pre-interest earnings statistics, such as EBIT, to account for both debt and equity. The denominator is average net debt plus equity. Using EBIT as the numerator would exclude the tax-effect. In order to account for the tax effect, one could use NOPAT or EBIAT instead (Rosenbaum and Pearl, 2013).

Nonetheless, here ROIC was based on EBIT simply because the tax might differ significantly for each individual firm due to either international operations, deferred tax credits or other tax adjustments. Staples´ ROIC is decent compared to its peers in the retail tier, being especially close to both Office Depot's and GameStop's ROIC. Looking beyond the retail tier, it becomes evident that Staples is falling behind both the distribution tier and the top competitor tier.

Return on equity is given by net income divided by average shareholder equity. Compared to its peers, Staples is doing decent compare to both the retail and distribution tier, and is also not far behind its top competitors, when taking into consideration the median. What should be noted is that Office Depot has a considerably higher return on equity compared to Staples. This might be due to Office Depot being in a more leveraged position, which would also explain the higher beta.

Return on asset is calculated by net income divided by average total assets and measures how the company´s asset base generates income (Rosenbaum and Pearl, 2013). Staples´ ROA is decent and above the overall median, indicating a good ability to utilize the asset base efficiently. Compared to the retail tier, Staples is in the high-end, but below the distribution tier´s median. Office Depot´s ROA, however, is the highest in the retail tier, which might be one explanation for the high ROE.

The implied dividend yield is the most recent quarterly dividend per share times 4, divided by current share price. This is a rough estimate of the dividend yield and can indicate whether the current company has a tendency to reinvest or distribute the generated income. Staples´ implied dividend yield is high compared to its peers, which can be interpreted as an inability of the current management to reinvest and expand.

Looking at the leverage ratios, Staples is in a less leveraged position than most of the comparable companies. Not only is Debt to Total capitalization and Debt to EBITDA almost half of the median for the retail tier, the net debt to EBITDA is negative indication that Staples has more cash than debt. What is noticeable also is that Office Depot is in a much more leveraged position than Staples. The Debt to EBITDA can be taken as a rough measure of how many years of a company´s cash flow is needed in order to repay its debt (Rosenbaum and Pearl, 2013). Staples´ number shows that the company is in a very comfortable position regarding repayment of the current debt. The peer closest to Staples in terms of leverage is Barnes & Noble.

The coverage ratios are an indicator of the specific company´s ability to meet its interest obligations (Rosenbaum and Pearl, 2013). As with leverage ratios, Staples generally is in a comfortable position, with ratios higher than those of most companies in the retail tier and higher ratios than the overall median, with only EBIT to interest expense being lower. Again, Staples´ closest peer in terms of coverage ratios is Barnes & Noble.

Staples overview

	Profitability	Growth	Beta	Returns	Leverage	Coverage
Summary	Lower gross profit and EBITDA margins	low historical growth, optimistic future growth	Retail peers have same volatility as market. Office depot more volatile	Decent ROIC and ROE. High ROA	Less Leverage position	Higher coverage ratios than its peers
Assesment	Room for improving profitability	Volatile growth	Slightly more volatile operation compared to the market	Overall decent returns and good utilization of asset base	Comfortable financial position with low risk	Good ability to cover interest obligations
Most comparable	Office Depot and Best Buy	Office depot	Retail tier and Top competitor tier	Office Depot and GameStop	Barnes & Noble	Barnes & Noble

Staples, compared to its peers, is in an overall good position for a leveraged buyout. With low debt and good coverage ratios the company will have little problem coping with additional debt. Sycamore Partners will, however, have to look into improving profitability and reducing the growth volatility. Regarding the most comparable firms, Office Depot not only is the most comparable in terms of business description, but also bears a lot of resemblance to Staples in terms of profitability, growth and returns. In terms of capital structure Barnes & Nobles is a better peer.

Having established Staples' relative position and having identified the closest and best comparable companies in terms of profitability, growth, beta, returns, leverage and coverage, the next step would be to compare trading multiples with special emphasis on the best comparable.

Staples Inc.
Comparable companies analysis
($ in millions, except per share date)

						Enterprise Value/										
Company	Ticker	Share Price 28-07-2017	% of 52-wk. High	Equity Value	Enterprise Value	LTM Sales	2017E Sales	2018E Sales	LTM EBITDA	2017E EBITDA	2018E EBITDA	LTM EBIT	2017E EBIT	2018E EBIT	LTM EBITDA Margin	Total Debt/ EBITDA
Staples inc.	**SPLS**	**$10.25**	**70%**	**$6,766**	**$6,618**	**0.4x**	**0.4x**	**0.4x**	**6.2x**	**5.9x**	**5.5x**	**9.7x**	**8.7x**	**7.8x**	**6%**	**0.5x**
Tier I: Retail Industry																
Best Buy Co., Inc.	BBY	$57.64	73%	$17,915	$17,860	0.4x	0.5x	0.4x	7.2x	7.4x	6.8x	9.8x	10.2x	9.1x	6%	0.5x
Bed, Bath and Beyond Inc.	BBBY	29.30	73%	4,136	5,269	0.4x	0.4x	0.4x	4.2x	3.7x	4.9x	5.5x	6.9x	10.8x	10%	1.2x
Dick's Sporting Goods, Inc.	DKS	36.67	70%	3,985	4,040	0.5x	0.5x	0.5x	5.1x	5.4x	6.2x	6.9x	8.0x	10.0x	10%	0.2x
Office Depot, Inc.	ODP	5.76	92%	3,064	3,435	0.3x	0.3x	0.3x	5.4x	5.7x	6.5x	7.2x	7.7x	9.8x	6%	1.8x
GameStop Corp.	GME	21.50	85%	2,180	2,734	0.3x	0.3x	0.3x	4.0x	4.0x	4.3x	5.2x	5.1x	5.7x	8%	1.2x
Barnes & Noble, Inc.	BKS	8.20	91%	594	666	0.2x	0.2x	0.2x	3.3x	3.6x	5.2x	7.8x	9.6x	-5.3x	5%	0.4x
Mean						**0.4x**	**0.4x**	**0.4x**	**4.9x**	**5.0x**	**5.7x**	**7.1x**	**7.9x**	**6.7x**	**8%**	**0.9x**
Median						**0.4x**	**0.4x**	**0.4x**	**4.7x**	**4.7x**	**5.7x**	**7.1x**	**7.8x**	**9.5x**	**7%**	**0.9x**
Tier II: Distribution Industry																
Cintas Corporation	CTAS	$133.86	75%	$14,529	$16,871	3.0x	3.2x	2.6x	15.0x	17.4x	13.2x	18.8x	21.8x	16.9x	20%	2.3x
Genuine Parts Company	GPC	83.93	78%	12,439	12,786	0.8x	0.8x	0.7x	10.4x	8.7x	8.8x	11.9x	9.8x	10.2x	8%	0.4x
W.W. Grainger, Inc.	GWW	165.23	53%	9,706	11,823	1.2x	1.1x	1.1x	8.7x	8.3x	7.8x	10.8x	10.2x	9.4x	13%	1.7x
HD Supply Holdings, Inc.	HDS	32.35	77%	6,503	10,474	1.4x	2.0x	1.8x	11.6x	14.3x	12.5x	13.1x	16.7x	14.5x	12%	4.5x
Pool Corp	POOL	108.24	72%	4,648	5,159	1.9x	1.9x	1.7x	17.6x	16.6x	14.8x	19.2x	18.2x	16.3x	11%	1.8x
MSC Industrial Direct Co., Inc.	MSM	72.30	72%	4,119	4,304	1.5x	1.3x	1.3x	9.0x	8.7x	8.0x	10.4x	10.0x	9.1x	16%	0.4x
Essendant Inc.	ESND	11.83	65%	434	915	0.2x	0.2x	0.2x	7.0x	n/a	n/a	10.5x	n/a	n/a	3%	3.8x
Mean						**1.4x**	**1.5x**	**1.3x**	**11.3x**	**12.3x**	**10.9x**	**13.5x**	**14.4x**	**12.7x**	**0.1x**	**2.1x**
Median						**1.4x**	**1.3x**	**1.3x**	**10.4x**	**11.5x**	**10.7x**	**11.9x**	**13.4x**	**12.4x**	**0.1x**	**1.8x**
Tier III: Top Competitors																
Apple Inc	AAPL	$149.50	81%	$788,522	$859,815	3.8x	3.8x	3.3x	12.2x	12.0x	10.8x	14.3x	14.0x	12.4x	31%	1.3x
Amazon.com, Inc.	AMZN	1,020.04	63%	500,840	495,320	3.3x	2.8x	2.1x	29.7x	24.8x	18.5x	68.3x	120.6x	80.3x	11%	0.5x
Wal-Mart Stores Inc	WMT	79.81	73%	242,144	272,038	0.6x	0.5x	0.5x	8.2x	8.1x	8.3x	12.0x	12.1x	12.2x	7%	1.0x
The Home Depot, Inc.	HD	148.08	71%	177,252	196,844	2.0x	2.1x	2.0x	12.2x	12.8x	11.8x	14.0x	14.7x	13.4x	17%	1.5x
Costco Wholesale Corporation	COST	152.89	76%	67,415	80,220	0.6x	0.6x	0.6x	14.6x	14.8x	13.4x	19.5x	19.8x	17.8x	4%	1.2x
FedEx Corporation	FDX	208.04	76%	56,587	68,221	1.1x	1.1x	1.0x	8.6x	8.1x	7.8x	14.0x	12.5x	12.0x	13%	1.9x
Target Corporation	TGT	56.11	71%	33,402	42,003	0.6x	0.6x	0.6x	5.2x	5.8x	6.5x	7.6x	8.5x	9.8x	12%	1.3x
Best Buy Co, Inc.	BBY	57.64	73%	17,915	17,860	0.4x	0.5x	0.4x	7.2x	7.4x	6.8x	9.8x	10.2x	9.1x	6%	0.5x
Xerox Corporation	XRX	30.43	81%	7,799	11,038	1.1x	1.1x	1.1x	6.4x	6.2x	6.2x	9.3x	8.4x	8.8x	17%	2.5x
Office Depot, Inc.	ODP	5.76	92%	3,064	3,435	0.3x	0.3x	0.3x	5.4x	5.7x	6.5x	7.2x	7.7x	9.8x	6%	1.8x
Mean						**1.4x**	**1.3x**	**1.2x**	**11.0x**	**10.6x**	**9.6x**	**17.6x**	**22.8x**	**18.6x**	**0.1x**	**1.3x**
Median						**0.8x**	**0.8x**	**0.8x**	**8.4x**	**8.1x**	**8.0x**	**13.0x**	**12.3x**	**12.1x**	**0.1x**	**1.3x**
Overall																
Mean						**1.1x**	**1.1x**	**1.0x**	**9.5x**	**9.5x**	**8.9x**	**13.6x**	**16.5x**	**13.7x**	**0.1x**	**1.5x**
Median						**0.6x**	**0.6x**	**0.6x**	**8.2x**	**8.1x**	**7.8x**	**10.5x**	**10.2x**	**10.1x**	**0.1x**	**1.3x**
High						**3.8x**	**3.8x**	**3.3x**	**29.7x**	**24.8x**	**18.5x**	**68.3x**	**120.6x**	**80.3x**	**0.3x**	**4.5x**
Low						**0.2x**	**0.2x**	**0.2x**	**3.3x**	**3.6x**	**4.3x**	**5.2x**	**5.1x**	**-5.3x**	**0.0x**	**0.2x**

The main focus when comparing the trading multiples will be on the EV to EBITDA, given the reasons discussed in previous sections. The overall median for EV to EBTIDA isn't too far from Staples´ own enterprise multiples, while the mean is higher though. Considering all tiers, the retail tier is by far the most comparable one, while the distribution tier has EV to EBITDA multiples double those of Staples. The top competitor tier has higher multiples than Staples as well. In terms of both EV to sales, EBITDA and EBIT, the retail tier is the most comparable. The closest peer in terms of EV to EBITDA are Office Depot and Dick's Sporting Goods, Inc. The multiples of Best Buy are significantly higher, while those of Barnes & Noble are significantly lower.

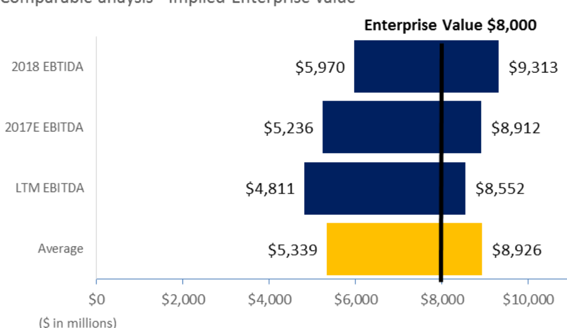
2.2.6.Determining value

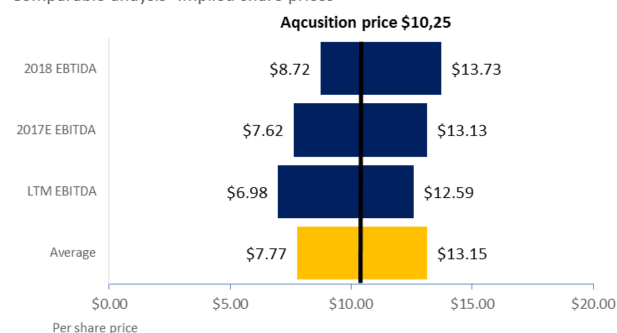
Having both historical and projected numbers gives a good range of options. The primary focus will however be on the projected number, as research have shown that forward-looking multiples are more accurate predictors of value than historical multiples (Koller et al., 2015). Starting at the median for EV to EBITDA for 2017E of the retail tier, with a value of 5.2x is a good starting point. The smallest multiple is 3.6x and the highest is 7.4x, giving a suitable starting range. The closest peer, Office Depot, has a value of 5.7x, further supporting the range of the value. Barnes & Noble is however of less value, 3.6x while Best Buy is slightly higher with 7.4x. Looking at the LTM EBITDA with median of 4.7x and considering that both Office Depot and Staples don't have multiples below 5x it seems reasonable to adjust the lower range limit to 4.5X. Adjusting the upper range limit to 8.0x is done in order to adjust for the top competitors median. Same adjustments and considerations have been done for both LTM EBTIDA and 2018E EBITDA.

Staples Inc.
Comparable analysis - Implied Valuation Range
($ in millions, last twelve months ending mid 2017)

EBITDA	Financial Metric	Multiple Range			Implied Enterprise value			Less: Net Debt	Implied Equity value			Fully Diluted Shares	Implied Share Prices		
LTM	$1,069	4.5x	-	8.0x	$4,811	-	$8,552	$(148)	$4,663	-	$8,404	667.7	$6.98	-	$12.59
2017E	$1,114	4.7x	-	8.0x	$5,236	-	$8,912	$(148)	$5,088	-	$8,764	667.7	$7.62	-	$13.13
2018E	$1,194	5.0x	-	7.8x	$5,970	-	$9,313	$(148)	$5,822	-	$9,165	667.7	$8.72	-	$13.73

Based on the chosen multiple ranges both implied enterprise value and equity value as well as share prices have been calculated based on the balance sheet LTM financial statistics. As mentioned before the acquisition price per share was $10.25. That price is included in all three ranges, but the ranges do point towards a lower share price. Same goes for the total acquisition price, which includes the redemption of debt, totaling to $8 billion in relation to enterprise value. The transaction will be further detailed later in the thesis. The net debt is based on a $1,008 million redemption in existing debt, subtracted by $860 million in cash, which will be used to repay the debt. These numbers are extracted from a release by Staples in connection with the transaction.





The overall assessment is that the calculated value ranges does include the final acquistion price paid by Sycamore partners. Had the EV to EBTIDA multiple of office depot been applied would the average implied share price be $9.91, which is slightly under the acquistion price. Had the median of the retail tier been used would it have resulting in an average share price of $8.50. As both average prices is below the acquistion price, does it indicate an overvalued acquistion price. This does however not price premium into account. Overall does the comparable valuation conclude that given the most comparable companies is the acquistion price sligthy overvalued with a low margin.

2.3.Precedent valuation

The precedent valuation follows the same logic as the comparable valuation valuing a company through a comparable analysis. The difference between precedent valuation and comparable valuation is however, the premises for the precedent valuation are not comparable companies but comparable transactions. Instead of extrapolating a value range based on companies that share the same characteristics, the precedent valuation bases the value on mergers and acquisitions of comparable transactions (Rosenbaum and Pearl, 2013). Having to focus on transactions requires the assessment of additional aspects. Market condition, deal dynamic, motive for the acquisition and purchase considerations are all relevant factors when comparing transactions. These additional aspects will be discussed, since they will have influence on the valuation.

2.3.1.Selection of precedent transactions

The selection of the comparable transactions requires a good understanding of Staples and Sycamore Partners. Staples' main characteristics were detailed in the sections regarding Staples and Sycamore partners´ transactions history was detailed in the sector regarding Sycamore partners. Particular Staples´ sector specification will be the main focus, while Sycamore partners´ tendencies to acquire retail companies and carve-out the business into more focused companies will also play a significant part.

Further will market condition play a part. The market condition influences the selection range by limiting the time frame of which transaction will be selected from. USA is currently going through its longest running bull market, since March 2009 until today (Bullock and Fox, 2018). Being under the conditions of a bull market, means low-debt rates, a willing market, favorable debt terms and acquirers being able to support higher purchase prices. Particular financial sponsors will have a tendency to acquirer at higher prices (Rosenbaum and Pearl, 2013). Given the US bull market, the transactions selected will be within this time frame. Further will transaction that only includes a partially takeover not be included.

Further limitations could be implemented, like whether it was a stock or cash purchase or the acquirer was a financial sponsor or a strategic buyer, but for completing a proper list, these limitations were not implemented. This will however not exclude them from having an effect later on, especially when determining the value range.

2.3.2.Screening for precedent transactions

Having laid out the limits of the selection range to Staples´ sector specification and a time frame going from March 2009 until now, a list was produced. This list was like the comparable company list highly influence by the proxy statement related to the transaction of Staples. The list did however include transactions which required more information than was public available. These transactions were not included as a result. Further were two transactions added which were not on the list. Amazon´s acquisition of Wholefoods in 2017 and Staples´ failed merger with Office Depot in 2015. These two transactions have both been deemed comparable transaction based on the target´s sector specification and timing of the transaction. Just like the comparable valuation does the amount of selected transactions from the proxy statement include an upside and a downside, upside being similar foundation for the valuation and downside being biased towards the same value range.

2.3.3.Selected transactions

Initial list of Comparable Acquisitions
($ in millions)

List of Comparable Acquisitions
Selected Precedent Transactions in the Retail Sectors

Date Announced	Acquirer	Target	Transaction Type	Transaction Motive	Target Business Description	Equity Value	Enterprise Value	LTM Sales	LTM EBITDA
June 16, 2017	Amazon inc.	Whole Foods	Public/Public	Strategic buyer	Operates natural and organic foods supermarkets, offering a width variety of specialty products.	$13,448	$14,093	0.9x	10.3x
August 24, 2015	Sycamore Partners	Belk, Inc.	Sponsor/Private	Financial sponsor	Operates department stores in the US, offering fashion apparel, shoes and accessories	$2,683	$2,795	0.7x	6.8x
February 2, 2015	Staples inc.	Office Depot, Inc.	Public/Public	Strategic buyer	Provides a selection of office supplies products and services to consumers and businesses of various sizes.	$5,973	$6,590	0.6x	8.8x
December 15, 2014	BC Partners	PetSmart Inc.	Sponsor/Public	Financial sponsor	Specialty retailer of pet services and solutions through pet superstores and pet hotels.	$8,284	$8,110	1.2x	8.7x
July 28, 2014	Dollar Tree, Inc.	Family Dollar Stores, Inc.	Public/Public	Strategic buyer	General merchandise retailer of discount store. Operates in the US.	$9,154	$9,514	0.9x	12.2x
February 19, 2014	Signet Jewelers Ltd.	Zales	Public/Public	Strategic buyer	One of the largest fine jewelers in retail shopping malls across North America and Puerto Rico.	$942	$1,364	0.7x	16.8x
November 26, 2013	Men's Wearhouse Inc.	Jos A. Bank Clothiers, Inc.	Private/Public	Strategic buyer	Design, retail and direct-market men´s tailored and casual clothing and accessories.	$1,823	$1,781	1.7x	12.7x
September 9, 2013	Ares Management, CPPIB	Neiman Marcus	Sponsor/Sponsor	Financial sponsor	Luxury department stores retailer offering upscale assortment of apparal, accessories and jewelry.	N/A	$6,000	1.3x	9.1x
September 3, 2013	Jarden Corporation	Yankee Candle	Private/Private	Strategic buyer	Designs, manufactures, wholesales and retails scented candles.	N/A	$1,750	2.0x	8.3x
July 29, 2013	Hudson Bay Company (HBC)	Saks Incorporated	Public/Public	Strategic buyer	Retail sales of general lines of apparel such as suits, coats, dresses and home furnishings.	$2,362	$2,694	0.8x	10.9x
February 20, 2013	Office Depot, Inc.	OfficeMax	Public/Public	Strategic buyer	Providers of office goods and services to small and medium-size businesses and individual consumers.	$1,192	$1,192	0.2x	6.7x
May 9, 2012	Bed Bath & Beyond Inc.	Cost Plus World Market	Public/Public	Strategic buyer	Specialty retailer of home furniture, decor, curtains, rugs, gifts, apparel as well as food and drinks.	$493	$514	0.5x	8.8x
May 2, 2012	Ascena Retail Group	Charming Shoppes	Public/Public	Strategic buyer	Retailer of women´s apparel, through large-size specialty apparel stores.	$872	$793	0.4x	9.5x
October 11, 2011	Ares Management	99 Cents Only Stores	Sponsor/Public	Financial sponsor	Extreme value retailer of primarly consumerable general merchandise.	$1,569	$1,355	0.9x	9.0x
June 29, 2011	Leonard Green, CVC	BJ's Wholesale	Sponsor/Public	Financial sponsor	Operages warehouse clubs and gas stations. Provides electrionics, office suppliies and other consumerables.	$2,770	$2,563	0.2x	6.8x
December 23, 2010	Leonard Green	Jo-Ann Stores	Sponsor/Public	Financial sponsor	Fabric and craft specialty retailer in the US. Offer apparel, craft and home decor.	$1,651	$1,539	0.7x	7.3x
November 23, 2010	Leonard Green, TPG	J. Crew Group	Sponsor/Public	Financial sponsor	Multi-brand apparel and accessories retailer in US and internationally. Offer women´s and men´s apparel.	$2,863	$2,619	1.5x	8.3x

2.3.4.Data of the precedent transactions

Locate necessary financial information:

The necessary financial information was extracted from proxy statements related to the transactions, annual reports, quarterly reports and financial articles descripting the acquisition. Further was Yahoo.finance and investing.com used to track historical stock prices. Reuters and Bloomberg webpages were further used for target business descriptions.

Key statistics, ratios and trading multiples

The key statistics includes metrics regarding size and leverage. Ratios and trading multiples includes enterprise value multiples, equity value to LTM net income. Further, will premium paid be determined based on historical stock prices.

Equity value is based on the fully diluted shares outstanding times the offer price per share. The offer price per share is either based on a cash offer or a stock-for-stock offer. The cash offer, is straight forward, as announcement and proxy statements include the cash offer per share. Stock for stock offers requires an exchange ratio, which is the offer price per share divided by the acquirer´s share price. A third option is the combination of both methods. Staples´s failed attempt to merger with Office Depot in 2015, was a combination of both a cash offer and a stock-for-stock offer. Staples offered a $7.25 cash offer price per share and a 0.2188 exchange ratio for Staples´s common stock. The exchange ratio was based on Staples´ share

price February 27, 2015 of $16.77. So, for each Office depot share, 0.2188 of a Staple share to the price of $16.77 was offered plus $7.25 in cash. Making the total offer price per share $10.92. The enterprise value is then based on the equity value plus debt minus cash.

The multiples are based on LTM Sales, LTM EBITDA and LTM EBIT. The LTM calculation has been described in the comparable valuation. Further are adjustments for non-recurring items also been made in same procedure as with the comparable analysis with adjustments for tax.

The premium paid is based on the offer price per share divided by unaffected share price minus 1. The unaffected share price is based on historical share prices of the target 1 day prior, 1 week prior and 1 month prior to the announcement of the transaction. Premium paid has been calculated for each date.

There has not been included any synergies expectations into the financial statistics as these synergies can be highly speculative and very few transactions offered valuable information in this regard.

2.4.5.Benchmark precedent transactions

The purpose of benchmarking the transactions is to determine which of them are the most comparable to Sycamore partners´ acquisition of Staples. This benchmark we focus much more on the type of acquisition than the statistics and ratios. This consideration is based on the premise that the motive and the type of transaction is of much more value in terms of determining truly comparable transactions. The following output of key statistics, ratios and multiples were produced.

Staples Inc.
Precedent Transaction analysis
($ in millions)

							Enterprise Value/			LTM	Total	Equity Value/	Premium paid		
			Transaction	Purchase	Equity	Enterprise	LTM	LTM	LTM	EBITDA	Debt/	LTM	Days Prior to unaffected		
Date announced	Acquirer	Target	Type	Consideration	Value	Value	Sales	EBITDA	EBIT	Margin	EBITDA	Net Income	1	7	30
June.28 2017	**Sycamore Partners**	**Staples Inc.**	**Sponsor/Public**	**Cash**	**$6,766**	**$6,618**	**0.4x**	**6.2x**	**9.7x**	**6%**	**1.0x**	**9.4x**	12%	18%	14%
Tier I: Retail Industry, Financial sponsor															
August 24, 2015	Sycamore Partners	Belk, Inc.	Sponsor/Private	Cash	2,682.97	2,795.18	0.7x	6.8x	11.5x	10%	0.7x	20.3x	N/A	N/A	N/A
December 15, 2014	BC Partners	PetSmart Inc.	Sponsor/Public	Cash	8,283.57	8,110.22	1.2x	8.7x	11.6x	13%	0.0x	19.6x	7%	6%	14%
September 9, 2013	Ares Management, CPPIB	Neiman Marcus	Sponsor/Sponsor	Cash	N/A	6,000.00	1.3x	9.1x	13.0x	14%	4.1x	N/A	N/A	N/A	N/A
October 11, 2011	Ares Management	99 Cents Only Stores	Sponsor/Public	Cash	1,569.33	1,355.00	0.9x	9.0x	11.0x	10%	0.0x	20.3x	7%	19%	17%
June 29, 2011	Leonard Green, CVC	BJ's Wholesale	Sponsor/Public	Cash	2,770.16	2,563.47	0.2x	6.8x	10.5x	3%	0.0x	20.5x	7%	13%	0%
December 23, 2010	Leonard Green	Jo-Ann Stores	Sponsor/Public	Cash	1,651.27	1,538.87	0.7x	7.3x	10.1x	10%	0.0x	18.1x	34%	36%	34%
November 23, 2010	Leonard Green, TPG	J. Crew Group	Sponsor/Public	Cash	2,863.30	2,618.66	1.5x	8.3x	9.8x	18%	0.2x	18.1x	16%	28%	22%
Mean					**$3,303**	**$3,569**	**0.9x**	**8.0x**	**11.1x**	**11%**	**0.7x**	**19.5x**	**14%**	**21%**	**17%**
Median					**$2,727**	**$2,619**	**0.9x**	**8.3x**	**11.0x**	**10%**	**0.0x**	**19.9x**	**7%**	**19%**	**17%**
Tier II: Retail Industry, Strategic buyer															
June 16, 2017	Amazon inc.	Whole Foods	Public/Public	Cash	$13,448	$14,093	0.9x	10.3x	16.9x	8.6%	0.8x	27.9x	27%	18%	15%
February 2, 2015	Staples inc.	Office Depot, Inc.	Public/Public	Cash/Stock	5,973.47	6,590.47	0.6x	8.8x	13.1x	6.7%	2.1x	14.4x	44%	36%	30%
July 28, 2014	Dollar Tree, Inc.	Family Dollar Stores, Inc.	Public/Public	Cash	9,153.68	9,514.31	0.9x	12.2x	18.3x	7.4%	0.6x	26.0x	31%	33%	20%
February 19, 2014	Signet Jewelers Ltd.	Zales	Public/Public	Cash	941.58	1,363.59	0.7x	16.8x	32.3x	4.3%	5.5x	50.1x	41%	44%	38%
November 26, 2013	Men's Wearhouse Inc.	Jos A. Bank Clothiers, Inc.	Private/Public	Cash	1,823.25	1,781.41	1.7x	12.7x	17.1x	13.6%	0.3x	28.1x	79%	79%	74%
September 3, 2013	Jarden Corporation	Yankee Candle	Private/Private	Cash	N/A	1,750.00	2.0x	8.3x	9.4x	24.0%	6.1x	N/A	N/A	N/A	N/A
July 29, 2013	Hudson Bay Company (HBC)	Saks Incorporated	Public/Public	Cash	2,362.48	2,694.03	0.8x	10.9x	21.8x	7.7%	1.4x	25.3x	5%	7%	17%
February 20, 2013	Office Depot, Inc.	OfficeMax	Public/Public	Stock	1,192.36	1,192.36	0.2x	6.7x	9.7x	3.5%	0.0x	14.5x	4%	25%	22%
May 9, 2012	Bed Bath & Beyond Inc.	Cost Plus World Market	Public/Public	Cash	493.24	513.51	0.5x	8.8x	13.1x	5.9%	0.4x	21.0x	22%	16%	26%
May 2, 2012	Ascena Retail Group	Charming Shoppes	Public/Public	Cash	872.42	793.04	0.4x	9.5x	30.2x	4.3%	1.6x	-120.1x	25%	25%	22%
Mean					**$4,029**	**$4,029**	**0.9x**	**10.5x**	**18.2x**	**9%**	**1.9x**	**9.7x**	**31%**	**31%**	**29%**
Median					**$1,823**	**$1,766**	**0.8x**	**9.9x**	**17.0x**	**7%**	**1.1x**	**25.3x**	**27%**	**25%**	**22%**
Overall															
Mean					**$3,739**	**$3,839**	**0.9x**	**9.5x**	**15.3x**	**10%**	**1.4x**	**13.6x**	**25%**	**28%**	**25%**
Median					**$2,362**	**$2,563**	**0.8x**	**8.8x**	**13.0x**	**9%**	**0.6x**	**20.3x**	**24%**	**25%**	**22%**
High					**$13,448**	**$14,093**	**2.0x**	**16.8x**	**32.3x**	**24%**	**6.1x**	**50.1x**	**79%**	**79%**	**74%**
Low					**$493**	**$514**	**0.2x**	**6.7x**	**9.4x**	**3%**	**0.0x**	**-120.1x**	**4%**	**6%**	**(0%)**

The categorization is based on the whether the acquirer was deemed a strategic buyer of a financial sponsor. This separation between strategic buyer and financial sponsor is based on the acquirer´s characteristics in relation to the target.

The transaction type describes characteristics of the acquirer and the target at the acquisition. For instance is Sycamore Partners a financial sponsor while Belk, Inc. was a private owned company. Belk, Inc. did however have privately owned shares to separate the ownership which were, in limited numbers, traded on the OTC market (SEC Form 10-K, Belk, Inc., 2015). This explains the equity valuation for the transactions. The two

transactions with N/A at the equity value is a result of limited available public data, as both these transactions were between two private companies.

The purchase consideration describes whether the transactions were cash, stock or a combination. The equity value and enterprise value are based on the purchase price and includes the premium paid. It comes to no surprise that the financial sponsor tier has the highest median in terms of both equity value and enterprise value as this type of transaction usually comes in the form of a leverage buyout and thus gives way to more capital usage (Rosenbaum and Pearl, 2013). The high mean in the strategic buyer tier is mainly due to Amazon´s acquisition of Whole foods in 2017. Given that Staples transaction was by a financial sponsor and the acquisition was through a leverage buyout, the financial sponsor tier is the most comparable in terms of motive of the transaction and also in terms of size.

The trading multiples enterprise value to LTM sales, LTM EBITDA and LTM EBIT are, with the exception of LTM sales higher for the strategic buyer tier. The main reason for higher trading multiples lies in the potential ability to realize synergies through the transaction, which results in the acquirer´s willingness to pay higher prices (Rosenbaum and Pearl, 2013). The LTM EBTIDA multiple is low for Staples compared to both tiers and only Sycamore Partners´ acquisition of Belk, Inc., Leonard Green´s and CVC´s acquisition of BJ´s Wholesale and Office Depot´s acquisition of OfficeMax are considered close to Staples. Especially Sycamore Partners and Office Depots acquisitions are considered the most comparable - Sycamores Partners because of the acquirer and Office Depots because of the target´s specification. Overall are Staples' multiples considered in the low end of the multiple range.

In terms of the LTM EBTIDA margins the closest transaction was Bed Bath & Beyond´s, Inc. acquisition of Cost Plus World Market, Staples´ failed merges with Office Depot and Dollar Tree´s acquisition of Family Dollar Stores. All these transactions are included in the strategic buyer tier.

The Total debt to EBITDA is considerably lower for the financial sponsor tier compares to the strategic buyer. This is due to the required indebtedness a leverage buyout usually requires, meaning that targets with much debt already in place is less desired. Still, some of the transactions have a high total debt to EBITDA. The target Neimann was bought by Ares Management and CPPIB in 2013 from private-equity firms TPG and Warburg Pincus LLC, which explains the high amount of debt attach to the target (Chaudhuri and Spector, 2013). The closest comparable transaction is Sycamore Partners acquisition of Belk.

The equity value to LTM Net income are all very high except the transaction of Charming Shoppes as the target recorded negative net income even after adjustments. Staples´ multiple is however very low compared to the comparable transactions.

In terms with the premium paid is the financial sponsor tier the closest. This is very much related to the already discussed subject of paying extra for the potential realization of synergies. The closest comparable transaction is the acquisition of 99 Cents Only Stores by Ares Management. The business of the target might not be very similar to Staples, but the transaction type is, however.

2.3.6.Determining value

In the previous section it was detailed how the financial sponsor tier is the closest comparable tier, while the transactions of Belk and OfficeMax are the closet transactions in terms of multiples. While the Belk transaction is the most comparable in terms of type of transaction, is the OfficeMax the most comparable in terms of characteristics of the target. Further will the failed merger of Office Depot also be of value guidance in determining the value range.

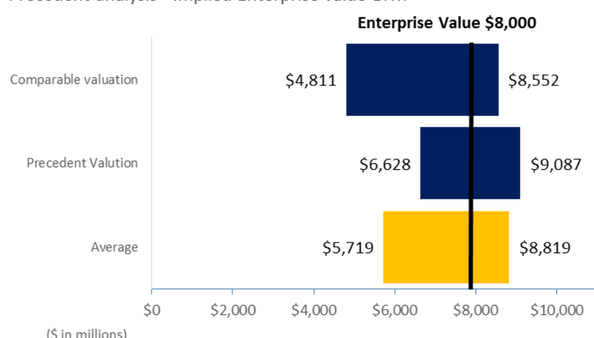
The main multiple used to extrapolate the value range will be enterprise value to EBITDA, as previous discussed in the comparable valuation, this multiple represents the best proxy for operational performance not distorted by difference accounting practices.

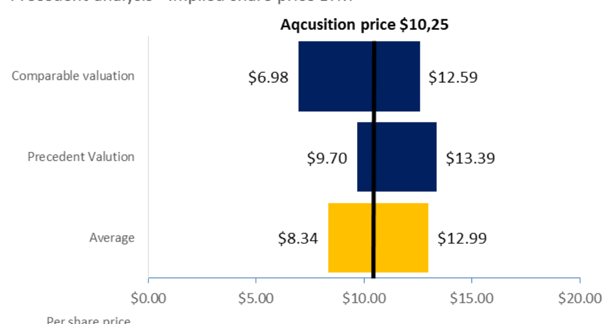
The lower range limit will be based on Staples´ own multiple of 6.2x and will for simplicity be rounded to a 6.0x multiple. Lowering the already lowest multiple can be defended in the regard of precedent multiple in most cases have higher multiples as they include the premium paid (Rosenbaum and Pearl, 2013). The upper range limit will be based on Staples failed merger with Office Depot in 2015 rounded to 9.0x.

Staples Inc.
Precedent analysis - Implied Valuation Range
($ in millions, last twelve months ending mid 2017)

EBITDA	Financial Metric	Multiple Range	Implied Enterprise value	Less: Net Debt	Implied Equity value	Fully Diluted Shares	Implied Share Prices
LTM	$1,069	6.2x - 8.5x	$6,628 - $9,087	$(148)	$6,480 - $8,939	667.7	$9.70 - $13.39

Based on the multiple range the implied enterprise value range can be determined. Having applied the precedent valuation, it is now possible to compare the valuation range with the range of the comparable valuation.





The black line represent the actual transaction price for the enterprise value of Staples and the comparable valuation range is LTM enterprise values multiples used in the comparable valuation. The precedent valuation range is, as expected, higher than the comparable which is due to the premiums paid. The same goes for the implied share price.

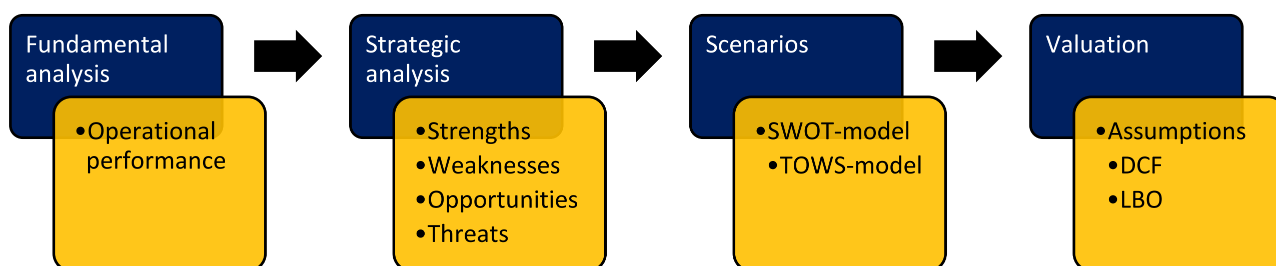
Had the EV to EBTIDA multiple of the failed merger between Staples and office depot been applied would the implied share price be $10.92, which is slightly over the acquistion price. The financial sponsor tier´s median of 8.3x would produce an implied share price of $13.25, which is also above the acqustion price. The transaction of Staples compared to, both comparable transaction made by financial sponsors and a fail transaction of the closest peer, all give indication of an underpriced acquistion price. As the comparable valuation concluded a slight overpricing is other valuation approaches required to make a full assessment of the transaction price

2.4. Fundamental analysis of Staples Inc.

To perform a valuation of Staples, both a strategic analysis and a fundamental analysis are required. Starting with the fundamental analysis will ensure a more complete understanding of Staple´s operation and performance and help direct the strategic analysis. Understanding Staples´ financial position at the time of the acquisition compared to its peers will outline the strengths and weaknesses Staples and its acquirer will need to address looking forward and will further help with the assessment of the future opportunities and threats, Staples might encounter.

A fundamental analysis is essential evaluating the company based on its financial results and operational performance. This can be done through comparing its profitability, growth, returns and risk profile with other comparable firms (Rosenbaum and Pearl, 2013). This will give a more general picture of Staples position and give a good indication of how Staples have performed relatively to its peers. To further the understanding for Staples a much more thorough analysis is however required. By comparing Staples to its closest competitor and reorganizing both firms reported financial statements, to account for the differences between operational, non-operational and sources of financing, a much deeper understanding of Staples operation performance can be acquired (Koller et al., 2015). This will be acquired through an analysis of the reorganized statements and further analysis of both revenue and operation. The result will provide a significant insight into Staples´ strengths and weaknesses and help direct the strategic analysis.

The strategic analysis will provide opportunities and threats and address Staples prior strategy up until the acquisition. Further will Sycamore partners previous actions come into consideration. The main objective for the strategic analysis is to assess different possible future outcomes. Combined with the strength and weaknesses from the fundamental analysis a SWOT analysis will enable a TOWS analysis. This TOWS analysis will be enable the creation of different scenarios and operational options. These scenarios will be the foundation for the assumption used in discounted cash flow valuation and leverage buyout analysis.



2.4.1. The general picture

Below is the overview from the comparable analysis given a general picture of Staples compared to the selected firms.

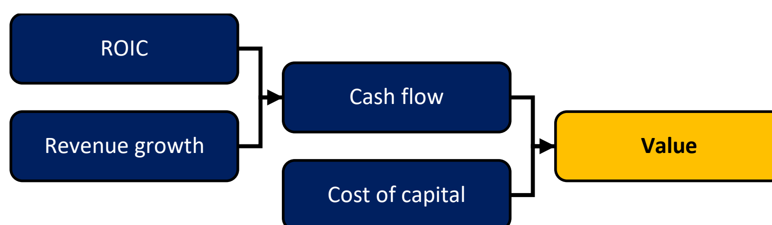
Staples overview						
	Profitability	**Growth**	**Beta**	**Returns**	**Leverage**	**Coverage**
Summary	Lower gross profit and EBITDA margins	low historical growth, optimistic future growth	Retail peers have same volatility as market. Office depot more volatile	Decent ROIC and ROE. High ROA	Less Leverage position	Higher coverage ratios than its peers
Assesment	Room for improving profitability	Volatile growth	Slightly more volatile operation compared to the market	Overall decent returns and good utilization of asset base	Comfortable financial position with low risk	Good ability to cover interest obligations

Staples compared to its peers is in an overall good position for a leverage buyout. With low debt and good coverage ratios the company will have little problem coping with additional debt. Sycamore partners will however have to look into improving profitability and reduce the growth volatility.

2.4.2.Creating value

The overall assessment gives a good insight into how Staples has a more general level of performance compared to its peers. Even though adjustments were made, such adjustments as non-recurring items and extraordinary events, the numbers might still include distorting components. For instance, does return on asset include all reported assets, disregarding the difference between operating and non-operating assets. Further does the coverage ratios not account for rental expenses of capitalized leases which are widely used in the retail industry. To account for all these adjustments, a reorganization of the reported financial statement is required.

To better understand the purpose and the demand for reorganizing the statements a short discussion of value is required. The main object for a company is to create value. Value creation is a widely discuss subject, but business value creation can be narrow down to: "*Companies that grow and earn a return on capital that exceeds their cost of capital create value"* (Koller et al., 2015). Companies that can produce positive ROIC will increase its cash flow through either ROIC improvements or increase in growth. This cash flow is then discounted by the cost of capital which eventually leads to the value of the company.



A higher ROIC is always good for the cash flow while higher growth is only adding value when the ROIC is above the cost of capital. Another way of looking at is regarding growth as a catalyst for ROIC performance. Taking this into a strategic perspective a high ROIC company should focus on improving growth while a low ROIC company should focus on improving growth (Koller et al., 2015).

The fundamental analysis main goal is to understand what drives both growth and ROIC. ROIC comprises of both invested capital and net operating profit less adjusted taxes (NOPLAT). With the reorganizing the financial statements, these statistics will be the foundation to understand what drives ROIC.

$$\text{ROIC} = \frac{\text{NOPLAT}}{\text{Invested Capital}}$$

Invested capital is the capital required to fund the operation without distinguishing how the capital is financed while NOPLAT represents the total after-tax operating income generated by the company´s invested capital (Koller et al., 2015). These two statistics can further be expressed in terms of FCF, further enhance the understanding of the value creation:

$$\text{FCF} = \text{NOPLAT} - \text{Net increase in invest capital}$$

The understanding of growth will be provided through a revenue analysis. Which will take industry specific metric into account and disaggregate the revenue in terms of different dimensions.

2.4.3.Reorganizing the accounting statements

A reported balance sheet includes operating assets, non-operating assets, operating liabilities, debt and its equivalents and equity and its equivalents. By separating the balance sheet into these categories both total invested capital and total funds invested funds can be calculated. Invested capital is operating assets minus operating liabilities while total funds invested is both invested capitals plus non-operating assets and debt and its equivalents plus equity and its equivalents (Koller et al., 2015).

$$\text{Invested capital} = \text{Operting assets} - \text{operating liabilities}$$

And

$$\text{Total funds invested} = \text{Invested capital} + \text{Nonoperating assets}$$

And

$$\text{Total funds invested} = \text{Debt and its equivalents} + \text{Equity and its equivalents}$$

2.4.4.Reorganizing the reported balance sheet

The annual reports have been extracted from sec.gov webpage with one minor adjustment. In the annual reports for 2012, 2013 and 2014, the reports had a separated account for deferred income tax asset on the balance sheet, while 2015 and 2016 didn't. Deferred income tax asset has been included in other assets as a result. The reported balance sheet can be found as appendix 6.

Going through the annual reports accrued expenses and other current liabilities could further be disaggregated in to more specific accounts. This further disaggregation is necessary for more detail reorganization of the balance sheet.

Accrued Expenses and other current liabilities **Fundamental analysis - Reported statements** *($ in millions)*					
	2012	**2013**	**2014**	**2015**	**2016**
Taxes	$288	$233	$237	$176	$183
Employee related	352	322	416	314	304
Restructuring reserves	128	100	123	82	53
Advertising and marketing	98	109	96	65	77
Other current liabilities	540	503	460	523	406
Accrued Expenses and other current liabilities	**$1,406**	**$1,267**	**$1,332**	**$1,160**	**$1,023**

Same goes for other long-term obligations. Each item have been extracted from descriptions in annual reports. The remaining unaccounted amounts have been consolidated into other long-term liabilities.

Other long-term obligations **Fundamental analysis - Reported statements** *($ in millions)*					
	2012	**2013**	**2014**	**2015**	**2016**
Restructuring liabilities	-	-	$13	$61	$56
Future rent eccalation clauses and lease incentives	108	95	77	63	63
Pension plans	42	27	73	38	28
Post retirement benefits plans	46	39	59	61	42
Accrued benefit liability (Pension)	88	66	132	99	70
Contractual obligations	72	72	-	-	-
Foreign currency adjustments	10	-	-	-	-
Other long-term liabilities	446	432	465	218	207
Reported other long-term obligations	**$723**	**$665**	**$686**	**$441**	**$396**

Unfortunately, there were minor descriptions of other assets, but prepaid benefit cost could however be extracted from other assets.

Other assets Fundamental analysis - Reported statements *($ in millions)*						
	2011	2012	2013	2014	2015	2016
Prepaid beneift cost (pension)	183	87	88	-	45	51
Other assets	933	730	628	641	497	398
Other assets, net prepaid benefit cost	**$750**	**$643**	**$540**	**$641**	**$452**	**$347**

Invested capital

Invested capital is the sums operating workings capital, fixed operating assets like property, plant and equipment, net other long-term operating assets, appropriate intangible assets and capitalized operating lease (Koller et al., 2015).

Operating working capital which is the current operating assets minus current operation liabilities is fairly straight forward. Going through the reported balance sheet current operating assets includes receivables, inventories and prepaid expenses and other current assets. Further is it assumed that the company has 2 % of the revenue as operating cash which is included in current operation assets. The current operating liabilities comprises of account payables plus both taxes and advertising and marketing from accrued expenses from the other current liabilities' specification. Both the restructuring reserves and employee related is categorized as debt and debt equivalent as these are not derived directly from the operation. Fixed operating assets comprises of property, plant and equipment while capitalized operating leases will be discussed in more detail later. Other operating assets, net other liabilities is based on the assumption that other assets, other current liabilities and other long-term obligations are operating items. Operating deferred-tax assets (liabilities) and intangible assets, tax gross-up will be detailed later. The result is listed below.

Other operating assets, net other liabilities Fundamental analysis - Reorganized statements *($ in millions)*					
	2012	2013	2014	2015	2016
Plus: Other assets, net prepaid benefit cost	$643	$540	$641	$452	$347
Less: Operating deferred-tax assets(liabilities) (1)	259	269	213	86	101
Less: Non-operating deferred-tax assets(liabilities) (1)	185	121	207	214	117
Less: Deferred tax liabilities, acquired intangibles (1)	(125)	(143)	(142)	(104)	(91)
Less: Other current liabilities (2)	540	503	460	523	406
Less: Other long-term obligations (3)	446	432	465	218	207
Other operating assets, net other liabilities	**$(663)**	**$(642)**	**$(562)**	**$(485)**	**$(393)**

(1) Detailed in reorganized deferred income taxes - Operating deferred-tax asset is less loss and credit carry forwards
(2) Accrued Expenses and other current liabilities specification
(3) Other long-term obligations specification

The categorization of all these line items makes up invested capital excluding goodwill. Having invested capital excluding goodwill gives way for calculating ROIC with and without goodwill. This is valuable for measuring the competitiveness of the business by differentiate between the ability to create value from the underlying business and create value after paying acquisition premiums (Koller et al., 2015). The acquisition premium is represented by goodwill and acquired intangibles. Staples has three different intangible assets categories: Customer relationships, trade names and technology. It is assumed that all is acquired intangibles based on Staples history of acquisitions and business operation.

To evaluate the goodwill and acquired intangibles properly two adjustments are required. The first adjustments is to subtract deferred tax liabilities related to amortization. Acquired intangibles are artificially increased to counter balance the creation of a deferred tax liability at the time of the acquisition. This deferred tax liability is created when amortization is not tax deductible. Accounts will in this situation create a deferred tax liability account which the will be drawn down over the amortization period. The deferred tax

liability on acquired intangibles is taken from deferred tax calculation described later (Koller et al., 2015). The second adjustments is to add back the cumulative amortization and impairment. The reason being that both goodwill and acquired intangible assets need to be adjusted upward to recapture historical amortization and impairments. The cumulative amortization and impairments need further to be subtracted by the tax shield created by the amortization of acquired intangibles (Koller et al., 2015).

Adjustment to Goodwill and Acquired intangibles
Fundamental analysis - Reorganized statements
($ in millions)

	2011	2012	2013	2014	2015	2016
Goodwill	3,982	$3,221	$3,234	$2,680	$2,032	$1,290
Acquired intangibles	450	385	383	335	235	205
Deferred tax liabilities, acquired intangibles	(149)	(125)	(143)	(142)	(104)	(91)
Goodwill and acquired intangibles, less tax gross-up	**$4,283**	**$3,481**	**$3,474**	**$2,873**	**$2,163**	**$1,404**
Cumulative impairment of goodwill	-	$772	$772	$1,181	$1,181	$2,559
Cumulative amortization of acquired intangibles	486	505	556	374	371	353
Cumulative tax shield	(158)	(811)	(186)	(191)	(67)	108
Cumulative amortization and impairment	**$327**	**$466**	**$1,142**	**$1,365**	**$1,485**	**$3,020**
Adjusted goodwill and acquired intangibles	**$4,611**	**$3,946**	**$4,615**	**$4,238**	**$3,648**	**$4,424**

Having adjusted the goodwill and intangibles makes it possible to calculate invested capital including goodwill and further helped given a more accurate picture of the company´s intangible assets and goodwill. Had the company capitalized any intangible assets, it would have been categorized as operational asset.

Total invested funds

The non-operating assets is the excess cash, which is the remaining cash and cash equivalent after operation cash, the current assets of discontinued operations, noncurrent assets of discounted operations, loss and credit carry forwards, net of taxes and prepaid benefit cost. The loss and credit carry forwards represents negative profits and is a future tax relief which can be claimed in future periods to reduce tax payments (Koller et al., 2015). The account has further been adjusted for value allowance. By being a part of the deferred tax asset (liability), which has been categorize as operating assets, the loss and credit carry forwards has been subtracted from deferred tax asset (liability). The reason for categorizing it as non-operating asset is because it is not derived directly from the operation and don't flow through the free cash flow (Koller et al., 2015). The prepaid benefits cost is a pension asset and should be treated as a non-operating assets as it does not generate operating profit.

Having invested capital including goodwill and all non-operating assets categorized, total invested funds can be calculated by summing the two together.

Reconciling total funds invested

Remember that total funds equaled both invested capital plus non-operating assets and debt and it equivalents plus equity and its equivalents. By categorizing the remaining accounts into either groups it will be possible to reconcile with total invested funds based on invested capital plus non-operating assets. This is also a way of checking the reorganizing of the balance sheet.

Debt and its equivalents

Debt is any short- or long-term interest-bearing liability, while debt equivalents is off-balance sheet debt and one-time debts that is not part of the on-going operation (Koller et al., 2015). These debt equivalents includes the likes of underfunded benefits plans for employees, restructuring reserves, escalation of rent of leases, liabilities connected to discontinued operations and capitalized leases.

Equity and its equivalents

Equity represents investor's funds, and investors reinvested funds which includes retained earnings and other comprehensive income. The other comprehensive income consists of currency adjustments, aggregate unrealized gains and losses and pensions plan fluctuations (Koller et al., 2015). The total stockholders´ equity includes both total equity and non-controlling interest and foreign currency adjustments from other long-term obligations. Equity equivalents are noncash adjustments to retained earnings and income. Like debt equivalents they are not deducted from enterprise value to determine equity (Koller et al., 2015). The most common equity equivalent is deferred taxes. Deferred tax is the adjustments to retained earnings that would have been made if the company reported cash taxes instead of accounting-based taxes. Having to incorporate deferred tax into the reorganized statements a more detail description of deferred tax is required. The main goal of reorganizing the statements is to categorize operating items from non-operating so by dividing deferred tax into these categories with further enhance the level of detail. A third category is however required, which is intangible assets gross-up which is the deferred tax liability related to intangible assets as described before.

The reported deferred income taxes were extracted from the annual reports and is found in the appendix 7.

Categorizing the deferred income taxes between operating and non-operating will be based whether the item is directly derived from the operation, if the item has a resemblance to items already categorized on the reorganized balance sheet and the recurrence of the item. For instance, have both other assets and liabilities been categorized as operating deferred tax as other liabilities and assets have been categorized as operating in the reorganized balance sheet. By separating the carryforwards and value allowance, the loss and credit carry forwards, net of taxes can be calculated. The carryforwards are categorized as non-operating, since past losses are typically unrelated to current profitability (Koller et al., 2015). By making this separating intangible assets can be adjusted properly, the income statement can be adjusted properly through tax and deferred tax can be subtracted from other operating assets, net other liabilities, as it is assumed that other assets and liabilities includes deferred tax items and added to equity equivalents. Further has the reorganized deferred income taxes been reconciled with the reported.

Reorganized deferred income taxes Fundamental analysis - Reorganized statements *($ in millions)*							
Operating deferred taxes	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Deferred rent	49	43	$39	$35	$28	$22	$20
Inventory	53	43	34	39	25	14	17
Insurance	36	39	39	36	37	34	32
Deferred revenue	27	83	52	16	14	11	12
Depreciation	45	12	30	57	50	19	22
Accrued expenses	-	22	21	19	15	20	13
Other—net, assets	79	27	59	11	14	10	14
Depreciation	-	-	-	-	-	(34)	(36)
Other—net, liability	(3)	(5)	(2)	1	(3)	(3)	(5)
Operating deferred-tax assets(liabilities)	**$285**	**$264**	**$272**	**$213**	**$180**	**$93**	**$89**
Increase(decrease) in operating deferred taxes		*$(21)*	*$7*	*$(58)*	*$(33)*	*$(87)*	*$(4)*
Nonoperating deferred taxes							
Net operating loss carryforwards	402	314	$336	$334	$288	$70	$59
Foreign tax credit carryforwards	110	91	66	7	3	-	
Capital loss carryforwards	20	19	20	18	27	13	14
Total valuation allowance	(332)	(308)	(410)	(414)	(350)	(76)	(85)
Loss and credit carry forwards, net of taxes	**$201**	**$115**	**$12**	**$(55)**	**$(33)**	**$7**	**$(12)**
Employee benefits	125	137	135	124	159	98	87
Bad debts	-	-	-	16	20	18	16
Financing	-	43	31	31	26	36	1
Merger related charges	20	15	7	-	-	-	-
Store closures	-	-	-	5	35	35	25
Acquisition Costs	-	-	-	-	-	20	-
Unrealized loss on hedge instruments	5	6	-	-	-	-	-
Non-operating deferred-tax assets(liabilities)	**$351**	**$316**	**$185**	**$121**	**$207**	**$214**	**$117**
Intangible assets, tax gross-up							
Intangibles	**$(201)**	**$(149)**	**$(125)**	**$(143)**	**$(142)**	**$(104)**	**$(91)**
Net deferred-tax assets	**$435**	**$432**	**$332**	**$191**	**$246**	**$203**	**$115**

Having reorganized the reported balance sheet and adjustments to both goodwill, intangible assets, other assets and liabilities and deferred tax both invested capital excluding and including goodwill is available and total invested funds both in terms of uses and sources. This is valuable information and will help further the fundamental analysis in understanding what drives ROIC.

Reorganized balance sheet

Fundamental analysis - Reorganized statements

($ in millions)

Total funds invested: Uses	**2012**	**2013**	**2014**	**2015**	**2016**
Operating cash	$488	$462	$394	$375	$365
Receivables, net	1,816	1,839	1,928	1,543	1,538
Merchandise inventories, net	2,314	2,328	2,144	1,791	1,737
Prepaid Expenses and other current assets	347	400	253	273	251
Operating current assets	**$4,964**	**$5,030**	**$4,719**	**$3,982**	**$3,891**
Account Payable	$1,896	$1,997	$1,867	$1,685	$1,706
Taxes(1)	288	233	237	176	183
Advertising and marketing (1)	98	109	96	65	77
Operating current liabilities	**$2,282**	**$2,339**	**$2,200**	**$1,926**	**$1,966**
Operating working capital	$2,682	$2,690	$2,519	$2,056	$1,925
Property and Equipment, net	1,963	1,871	1,705	1,286	1,147
Capitalized operating leases (2)	6,521	6,114	5,064	4,619	4,577
Other operating assets, net other liabilities (3)	(663)	(642)	(562)	(485)	(393)
Invested capital (excluding goodwill)	**$10,503**	**$10,034**	**$8,725**	**$7,477**	**$7,255**
Goodwill and acquired intangibles, less tax gross-up (4)	$3,481	$3,474	$2,873	$2,163	$1,404
Cumulative amortization and impairment (4)	466	1,142	1,365	1,485	3,020
Invested capital (including goodwill)	**$14,450**	**$14,649**	**$12,963**	**$11,124**	**$11,679**
Excess cash	$847	$30	$233	$450	$772
Current assets of discontinued operations	171	-	-	680	568
Noncurrent Assets of discontinued operations	-	-	-	1,010	-
Loss and credit carry forwards, net of taxes (5)	(12)	55	33	(7)	12
Prepaid beneift cost (pension) (6)	87	88	-	45	51
Total funds invested	**$15,541**	**$14,822**	**$13,230**	**$13,302**	**$13,082**

Total funds invested: sources	**2012**	**2013**	**2014**	**2015**	**2016**
Debt maturing within one year	$987.2	$104.0	$91.7	$15.0	$519.0
Long-term debt	1,002	1,000	1,024	1,016	529
Restructuring reserves (1)	128	100	123	82	53
Employee related (1)	352	322	416	314	304
Capitalized operating leases (2)	6,521	6,114	5,064	4,619	4,577
Contractual obligations (7)	72	72	-	-	-
Restructuring liabilities (7)	-	-	13	61	56
Accrued benefit liability (pension) (7)	88	66	132	99	70
Future rent excalation clauses and lease incentives (7)	108	95	77	63	63
Noncurrent liabilities of discontinued operations	-	-	-	66	-
Current liabilities of discontinued operations	130	-	-	405	402
Debt and debt equivalent	**$9,387**	**$7,874**	**$6,939**	**$6,740**	**$6,573**
Foreign currency adjustments (7)	$10.0	-	-	-	-
Deferred tax liabilities (assets), operating (5)	(284)	(158)	(147)	(100)	(77)
Deferred tax liabilities (assets), nonoperating (5)	(173)	(176)	(240)	(207)	(129)
Cumulative amortization and impairment (4)	466	1,142	1,365	1,485	3,020
Total stockholders' equity	6,136	6,141	5,313	5,384	3,696
Equity and equity equivalent	**$6,155**	**$6,948**	**$6,291**	**$6,562**	**$6,510**
Total funds invested	**$15,541**	**$14,822**	**$13,230**	**$13,302**	**$13,082**

(1) Accrued Expenses and other current liabilities specification

(2) Detailed in capitalized lease

(3) Detailed in other operating assets, net other liabilities

(4) Detailed in adjustment to Goodwill and Acquired intangibles

(5) Detailed in reorganized deferred income taxes

(6) Detailed in other assets

(7) Other long-term obligations specification

2.4.5.Reorganizing the income statement

Reported Income statement
Fundamental analysis - Reported statements
($ in millions)

	2012	2013	2014	2015	2016
Sales	$24,381	$23,114	$19,684	$18,764	$18,247
COGS	17,889	17,082	14,646	13,857	13,489
Gross profit	$6,492	$6,032	$5,038	$4,907	$4,758
Operating expenses					
SG&A	4,884	4,735	4,096	3,993	3,845
Merger termination fee	-	-	-	-	250
Impairment of goodwill and long-lived assets	811	-	469	37	783
Restructuring charges	207	64	158	105	38
Amortization of intangibles	79	55	48	54	51
total operating expenses	$5,981	$4,854	$4,771	$4,189	$4,967
(Loss) gain on sale of businesses and assets, net	-	-	29	(5)	(55)
Operating (loss) income	$511	$1,178	$296	$713	$(264)
Other income (expense):					
Interest income	$5	$5	$2	$3	$6
Interest expense	(162)	(119)	(48)	(139)	(81)
Loss on early extinguishment of debt	(57)	-	-	-	(26)
Other income (expense), net	(31)	-	3	(13)	13
(Loss) income from continuing operations before income taxes	$266	$1,064	$253	$564	$(352)
Income tax expense	$426	$356	$128	$102	$107
Marginal tax rate	*160.2%*	*33.5%*	*50.6%*	*18.1%*	*-30.4%*
(Loss) income from continuing operations	$(160)	$708	$125	$462	$(459)
Discontinued operations:					
Pretax (loss) income of discontinued operations	$(50)	0	$15	$(72)	$(700)
Loss recognized on classification as held for sale	-	-	-	-	(231)
Loss on sale	-	-	-	-	(114)
Total pretax (loss) income of discontinued operations	$(50)	0	$15	$(72)	$(1,045)
Income tax (benefit) expense	-	-	5	11	(7)
(Loss) income from discontinued operations, net of income taxes	$(50)	0	$10	$(83)	$(1,038)
Net (loss) income	$(210)	$708	$135	$379	$(1,497)

The purpose of reorganizing the income statement is to determine NOPLAT. The NOPLAT can be separated into two parts, EBITA and operating cash taxes. EBITA is earnings before interest, taxes, and amortization of acquired intangibles. The reason for focusing on EBITA and not EBITDA is, as discussed in the comparable analysis, is that depreciation is an operating expense as it reflects the use and physical deterioration of the asset. The reason for not using EBIT is based on the accounting differences between intangible assets and tangible assets. While tangible assets are depreciated for the expected life, intangible assets are amortized and when investments are made into intangible assets, these investments are not capitalized but expensed. Because of that, when investments are made into intangible assets the reinvestment is already expensed, so by subtracting amortization the earnings are penalized twice, once for amortization and once through reinvestment (Koller et al., 2015). But, only the amortization related to acquired intangibles is subtracted, while amortization connected to capitalized intangibles are not subtracted. As, Staples has no capitalized intangible assets these adjustments has not been necessary. Having established why EBITA is used as the base for NOPLAT, adjustments to EBITA is necessary. These adjustments include non-operating items included in COGS and SG&A and pension adjustments. The pension adjustments will be detailed later in the fundamental analysis as well as the implied interest on capitalized leases. The non-operating adjustments are based on annual reports findings and notes.

Adjustments to EBITA		
Adjustment	**Origin**	**Description**
Inventory write-downs	COGS	The rationalization and improve efficiencies in its delivery fulfillment operations as well as the retail store closures.
Litigation costs	SG&A	Litigaition cost from business operation
Merger-related costs	SG&A	Legal and professional services costs associated with plans to the acquisition of Office Depot,
PNI data security incident costs	SG&A	Security breach in subsidiary which resulted in detailed customer information were compromised
Unfunded post-retirement life insurance benefit plan	SG&A	Amenmed of a unfunded post-retirement life insurance benefit plan
Unallocated expenses, net	SG&A	Stock-based compensation and income or loss associated with the Company's supplemental executive retirement plan.
Accelerated depreciation	SG&A	Improve efficiencies in our North American delivery fulfillment operations

Recall that the main objective with the reorganization of the financial statements is to separate operating items from non-operating items. This includes taxes. Separating non-operating tax from operating taxes will help depicting the operational performance as taxes in big corporations as Staples includes a lot of different adjustments, like tax credit, impairment and foreign taxes. This adjustment to taxes has been exercised through three steps.

The annual reports detail the reported tax on a detailed level which makes the adjustments possible.

Tax Table in % **Fundamental analysis - Reported statements** *($ in millions)*	**2012**	**2013**	**2014**	**2015**	**2016**
Federal statutory rate	35.0%	35.0%	35.0%	35.0%	35.0%
State effective rate, net of federal benefit	12.1%	2.3%	(1.7%)	2.5%	(2.0%)
Effect of foreign taxes	(11.3%)	(9.9%)	(22.1%)	(12.8%)	17.8%
Tax credits	(0.8%)	(0.4%)	(1.1%)	(0.5%)	1.0%
Changes in uncertain tax positions	8.0%	2.4%	(14.4%)	(8.8%)	(2.3%)
Goodwill impairment	82.5%	0.0%	46.6%	0.0%	(73.1%)
Change in valuation allowance	37.1%	3.8%	9.8%	1.1%	(2.9%)
Other	(2.0%)	0.3%	(1.2%)	1.6%	(4.0%)
Effective tax rate	**160.2%**	**33.5%**	**50.6%**	**18.1%**	**(30.4%)**

The tax table presents the different tax adjustments made by the company. Looking at the effective tax rate quickly becomes apparent why using the reported effective tax rate is not suitable for determine the operational performance. 2012 concluded in an effective tax rate of 160.2% which is primarily due to goodwill impairment and change in valuation allowance, which are both non-relatable to the operation of Staples. Using this tax rate on EBITA would highly underrate the performance. The first step is to transform the tax table in % into dollar amounts as the individual tax rate percentages are highly dependent on the performance of earnings before taxes, and could appear uncharacteristic high or low, which would distort the adjustments. For instance, if the EBT were very low, it could lead to tax credits being higher than normal and using this tax rate by multiplying would distort the adjustment (Koller et al., 2015). By multiplying each line item with the EBT a dollar-based tax table is achieved.

Step 1: Tax Table in $
Fundamental analysis - Reorganized statements
($ in millions)

	2012	2013	2014	2015	2016
EBT	**$266**	**$1,064**	**$253**	**$564**	**$(352)**
Federal statutory rate	93	372	89	197	(123)
State effective rate, net of federal benefit	32	24	(4)	14	7
Effect of foreign taxes	(30)	(105)	(56)	(72)	(63)
Tax credits	(2)	(4)	(3)	(3)	(4)
Changes in uncertain tax positions	21	26	(36)	(50)	8
Goodwill impairment	219	-	118	-	257
Change in valuation allowance	99	40	25	6	10
Other	(5)	3	(3)	9	14
Reported tax expense	**$426**	**$356**	**$128**	**$102**	**$107**

The next step is to determine the marginal tax on EBITA. This is done by determine what of the stated tax rates are deemed operational and non-operational. The Federal statutory rate and the state effective rate are used for the marginal tax rate on EBITA as they are the best proxies for marginal tax rate.

Step 2: Marginal tax on EBITA
Fundamental analysis - Reorganized statements
($ in millions)

	2012	2013	2014	2015	2016
Federal statutory rate	35.0%	35.0%	35.0%	35.0%	35.0%
State effective rate, net of federal benefit	12.1%	2.3%	-1.7%	2.5%	-2.0%
Marginal tax rate	**47.1%**	**37.3%**	**33.3%**	**37.5%**	**33.0%**
Adjusted EBITA	$1,238	$873	$647	$728	$753
Marginal tax on EBITA	**$583**	**$326**	**$215**	**$273**	**$248**

The last step is to adjust for other operating items, determine non-operating tax and determine operating cash taxes. The other operating taxes are determined based on the company's operation and characteristic of the tax. Tax credit effect of foreign taxes have both been deemed as other operating taxes given these two accounts usually are a result of international operations. Other has also been included as operation tax given previous assumptions of other items being categorized as operational items. Having the operation tax makes it possible to determining non-operating tax by subtracting operating tax from reported tax. The total operating tax determined is the accrual-based taxes reported, to determine the actual operating cash taxes, adjustments for deferred tax are required. The adjustment is to subtract the increase in operating deferred tax assets (liabilities) from operating taxes. The change in operating deferred tax asset are taken from the deferred tax specification.

Step 3: Adjusting taxes for other operating items					
Fundamental analysis - Reorganized statements					
($ in millions)					
Operating tax	**2012**	**2013**	**2014**	**2015**	**2016**
Tax credits	$(2)	$(4)	$(3)	$(3)	$(4)
Effect of foreign taxes	(30)	(105)	(56)	(72)	(63)
Other	(5)	3	(3)	9	14
Other operating taxes	**$(38)**	**$(106)**	**$(62)**	**$(66)**	**$(52)**
Marginal tax on EBITA	583	326	215	273	248
Operating tax	**$546**	**$219**	**$154**	**$207**	**$196**
Non-operating taxes					
Operating taxes	$546	$219	$154	$207	$196
Reported taxes	(426)	(356)	(128)	(102)	(107)
Non-operating taxes	**$120**	**$(137)**	**$26**	**$105**	**$89**
Operating cash taxes					
Operating tax	$546	$219	$154	$207	$196
Increase(decrease) in operating deferred taxes (1)	7	(58)	(33)	(87)	(4)
Operating cash taxes	**$553**	**$161**	**$120**	**$120**	**$192**

(1) Detailed in reorganized deferred income taxes

Having the adjustments to tax in place and having made the required adjustments to EBITA, makes way for determining NOPLAT.

Reconciliation with net income helps checking the result. The reconciliation starts with reported net income which is adjusted by adding back the increase in operating deferred-tax assets (liabilities). Amortization of acquired intangible assets are further subtracted. After that, are all the non-operating items on the reported income statement are added back as an expense and subtracted as an income. The pension adjustments are then added to together with the implied interest on capitalized lease. Lastly, non-operating taxes are subtracted, and non-operating items are used to adjust EBITA added back to the recalculated NOPLAT.

NOPLAT calculation

Fundamental analysis - Reorganized statements

($ in millions)

	2012	2013	2014	2015	2016
Sales	**$24,381**	**$23,114**	**$19,684**	**$18,764**	**$18,247**
Sales growth	*(1.2%)*	*(5.2%)*	*(14.8%)*	*(4.7%)*	*(2.8%)*
COGS	17,889	17,082	14,646	13,857	13,489
SG&A	4,476	4,332	3,691	3,605	3,467
Depreciation (1)	408	403	405	388	378
Impied interest, capitalized operating lease (2)	405	450	415	339	295
Pension adjustment (3)	(15)	(26)	(20)	(32)	(24)
EBITA	**$1,218**	**$873**	**$547**	**$607**	**$642**
Inventory write-downs	-	-	26	1	-
Litigation costs	-	-	-	-	14
Merger-related costs	-	-	-	53	21
PNI data security incident costs	-	-	-	18	-
Unfunded post-retirement life insurance benefit plan	-	-	-	-	3
Unallocated expenses, net	-	-	64	49	73
Accelerated depreciation	20	-	9	-	-
Total Non-operating items (4)	**$20**	**-**	**$99**	**$121**	**$111**
Adjusted EBITA	**$1,238**	**$873**	**$647**	**$728**	**$753**
% of revenue	*5.1%*	*3.8%*	*3.3%*	*3.9%*	*4.1%*
Operating cash taxes (5)	553	161	120	120	192
Operating cash tax rate	*44.7%*	*18.4%*	*18.6%*	*16.5%*	*25.5%*
NOPLAT	**$685**	**$712**	**$526**	**$608**	**$560**
% of revenue	*2.8%*	*3.1%*	*2.7%*	*3.2%*	*3.1%*
Reconciliation with net income					
Net (loss) income	**$(210)**	**$708**	**$135**	**$379**	**$(1,497)**
Decrease (increase) in operating deferred taxes (6)	(7)	58	33	87	4
Adjusted net income	**$(217)**	**$766**	**$168**	**$466**	**$(1,493)**
Amortization of intangibles	(79)	(55)	(48)	(54)	(51)
(Loss) gain on sale of businesses and assets, net	-	-	29	(5)	(55)
Interest income	5	5	2	3	6
Interest expense	(162)	(119)	(48)	(139)	(81)
Loss on early extinguishment of debt	(57)	-	-	-	(26)
Other income (expense), net	(31)	-	3	(13)	13
(Loss) income from discontinued operations, net of income taxes	(50)	-	10	(83)	(1,038)
Restructuring charges	(207)	(64)	(158)	(105)	(38)
Impairment of goodwill and long-lived assets	(811)	-	(469)	(37)	(783)
Merger termination fee	-	-	-	-	(250)
Impied interest, capitalized operating lease (2)	405	450	415	339	295
Pension adjustment (3)	(15)	(26)	(20)	(32)	(24)
Total	**$(1,002)**	**$191**	**$(284)**	**$(126)**	**$(2,032)**
Non-operating taxes (5)	**$(120)**	**$137**	**$(26)**	**$(105)**	**$(89)**
Total Non-operating items (4)	**$20**	**0**	**$99**	**$121**	**$111**
NOPLAT	**$685**	**$712**	**$526**	**$608**	**$560**

(1) Assumes the depreication is included in SG&A. SG&A is adjusted for this
(2) Detailed in operating leases
(3) Detailed in pension adjustments
(4) Total non-operating items have been detailed in adjustments to EBITA
(5) Detailed in tax adjustments
(6) Detailed in reorganized deferred income taxes

By reorganizing both the balance sheet and the income statement, invested capital and NOPLAT is now available for determining ROIC. There are however two items that needs to be addressed in detail before moving on to cash flow adjustments.

2.4.6.Operating lease

Before The Financial Accounting Standards Board (FASB) announced in February 2016 that with the new account standard (Financial Accounting Series: Accounting Standards Update, FASB, 2016) which requires companies to recognize operating lease asset and liabilities on the balance sheet (Trainer, 2018), operating leases were recorded as a rental expenses each period and with a report of future commitments in some notes (Koller et al., 2015). Given this adjustment where made after the historical period of which this fundamental analysis is based, adjustments for operation leases is required. The adjustments for operating leases help with the comparison between companies with different lease polices. For instance, would a company that preferred to acquire the assets instead of leasing them, be depicted as more asset heavy compared to companies that preferred leasing. Note, accounting for capitalized operating leases often leads to an overstated ROIC, as the non-recorded lease asset artificially increases the capital turnover and, in most cases, goes beyond off-setting, the lowering of operating profits through the rental expenses (Koller et al., 2015). The problem with off-balance sheet leases is that companies in most cases don't disclose the value of their leases and Staples is no exception. A common practice in investment banking is to multiple the rental expense by 8 when determining the capitalized operating lease. This method is a reasonable method given it is based on assumptions of cost of debt of 6% and an asset life of 15 years (Koller et al., 2015). But, to account for differences in lease managements a more detail approach was chosen. Given that this equation can be solved for periodic rental expenses:

$$Rental\ expenses_t = Asset\ value_{t-1}\left(K_d + \frac{1}{Asset\ life}\right)$$

So, by rearranging the equation from expressing the rental expenses to asset value, the value of the capitalized operating lease can be determined (Koller et al., 2015).

$$Asset\ Value = \frac{Rental\ expenses}{\left(K_d + \frac{1}{Asset\ life}\right)}$$

Having access to rental expenses through the annual reports the only two components needed is expected asset life and cost of debt, K_d. Given that operating lease will be categorized as an operating asset, only rent expense for continuing operations will be used for determining the capitalized operating lease.

Rent expenses
Fundamental analysis - Reported statements
($ in millions)

	2012	2013	2014	2015	2016
Rent expense for continuing operations	$839	$801	$657	$595	$576
Rent expense for discontinued operations	-	-	110	96	78
Total	**$839**	**$801**	**$767**	**$691**	**$654**

The cost of debt can be estimated using AA-rated yield, as the operating leases is secured by the underlying assets and is thus less risky than the company´s unsecured debt (Koller et al., 2015). The cost of debt then based on the monthly average of each year for 10-Year High Quality Market (HQM) Corporate Bond Spot Rate extracted from the Federal Reserve financial data. The asset life is assumed to be 10.9 years based on a study by Lim, Mann and Mihov, which examined 7,000 firms over 20 years and based the asset life operating leases on PP&E divided by annual straight-line depreciation (Lim et al., 2004). This is further supported by Staples own description of their lease holdings as expiring between 2017 and 2026 in their 2016 annual report. Having both cost of debt and asset life established the capitalized operating lease can be determined.

Operating capitalized lease
Fundamental analysis - Reorganized statements
($ in millions)

	2012	2013	2014	2015	2016
Rent expense for continuing operations	$839	$801	$657	$595	$576
Asset life	10.9	10.9	10.9	10.9	10.9
Cost of debt, AA-rated	3.7%	3.9%	3.8%	3.7%	3.4%
Total operating capitalized lease	**$6,521**	**$6,114**	**$5,064**	**$4,619**	**$4,577**

The amount in capitalized lease comes to no surprise given that most of Staples´ 1255 stores and 78 distribution and fulfillment centers are leased (Staples, Inc., Annual report, 2016). The capitalized operating leases are categorized under both operating non-current asset and debt and its equivalent, given the nature of the operating lease.

The implied interest which is subtracted from EBITA equals the cost of debt times the prior year´s value of the operating lease. The cost of debt is determined by the AA-rated interest plus a default spread based on the credit rating of Staples. The latest publication regarding Staples credit rating from Moody rate Staples overall company credit rating to B1 this is further supported by eMarketer Retail (Staples, eMarketer Retail, n.d.). The default spread calculated based on the credit rating is taken from New York University Stern´s database regarding ratings.

Implied interest
Fundamental analysis - Reorganized statements
($ in millions)

	2012	2013	2014	2015	2016
Credit rating	**B1**	**B1**	**B1**	**B1**	**B1**
Default spread	3.0%	3.0%	3.0%	3.0%	3.0%
AA-rated	3.7%	3.9%	3.8%	3.7%	3.4%
Cost of debt, interest	6.7%	6.9%	6.8%	6.7%	6.4%
Implied interest	**$405.0**	**$450.3**	**$414.6**	**$338.6**	**$295.3**

The implied interest will be deducted from EBITA to account for the capitalized operating leases interest.

2.4.7.Pension adjustments

Companies have since 2006 been obligated to report the present value of pension shortfalls and excess pension on their balance sheets (Financial Accounting Series: Accounting Standards Update, FASB, 2016). Excess pension assets are reported as non-operating assets since they don't generate profit while pension shortfall is recorded as debt and its equivalents. There is however no requirements related to the income statement. Expenses related to pension are in most cases included in the cost of sales where all cost and benefits associated with pension are recorded.

Pension and other post-retirement benefits plans
Fundamental analysis - Reported statements
($ in millions)

	2012	2013	2014	2015	2016
Service cost	$14	$18	$11	$21	$13
Interest cost	42	37	33	20	26
Expected return on plan assets	(57)	(63)	(53)	(52)	(50)
Amortization of unrecognized losses and prior service costs	4	14	12	17	17
Settlement or curtailment loss	-	-	1	-	12
Total cost (benefit)	**$2**	**$6**	**$4**	**$6**	**$18**

The service costs represent the benefits to employees given their current work and will categorized as operating cost. Interest cost and expected return on plant assets are both categorized as non-operating

expenses as there are not derived from the operation. Both amortization of unrecognized losses and prior service costs and settlement or curtailment loss will depend on the purpose of the analysis. If the analysis is for forecasting future cash flow both items will be categorized as non-operating since they represent past actions. Given that this analysis is for benchmarking the financial performance these expenses are treated as operating expenses (Koller et al., 2015). The pension adjustment is done by adding the total cost (benefit) and subtracting the operating expenses. This essentially removes all pension cost at first and then add back only the operating expenses.

Pension adjustments
Fundamental analysis - Reorganized statements
($ in millions)

	2012	2013	2014	2015	2016
Net periodic benefit cost	$2	$6	$4	$6	$18
Less: Service cost	14	18	11	21	13
Less: Amortization of unrecognized losses and prior service costs	4	14	12	17	17
Less: Settlement or curtailment loss	-	-	1	-	12
Pension adjustment	**$(15)**	**$(26)**	**$(20)**	**$(32)**	**$(24)**

This pension adjustment will improve the EBITA as the previous expenses related to pension included non-operating expenses, thus overstating the total pension expense.

2.4.8.Cash flow

The free cash flow comprises of two elements. The gross cash flow and the investments in invested capital. The gross cash flow is NOPLAT plus noncash operating expenses. Only the amortization already deducted from revenue in the calculation of NOPLAT should be added back. But, as Staples don’t have any capitalized intangible assets, only depreciation is added back. The gross investment in invested capital outlines the portion of the gross cash flow that are reinvested into invested capital. By subtracting the gross investment from the gross cash flow will produce the free cash flow. The gross investment comprises of the change in operating working capital, net capital expenditures, investment in capitalized operating leases, investment in goodwill and acquired intangibles, changes in other operating assets and foreign currency translation. The change in operating working capital represent the reinvestment required in the ongoing operation. The net capital expenditures is the investment in property, plant and equipment. The net capital expenditures are estimated by the change in net property, plant and equipment plus depreciation expenses. The capitalized operating lease is the change the operating leases items. The sudden decrease in the reinvestment in operation leases is mainly because of the reduction in Staples´ number of stores. This reduces rental expenses, and as the capitalized operating lease is based on the rental expenses, this significantly reduces the value of the capitalized operating lease. The investment in goodwill and acquired intangible assets is estimated by the adding the change in net goodwill and intangible assets to amortization expenses. The investment in other operating assets is based on the change in other operating assets. As Staples is running an international operation, the company will have to translate some of its operation into its home-currency. This restatement is an accounting adjustment and does not represent a cash change. It is impossible to remove this currency effect entirely, but it can be partially removed through the foreign currency translation extracted from the other comprehensive income.

Cash flow statement **Fundamental analysis - Reorganized statements** *($ in millions)*	2012	2013	2014	2015	2016
NOPLAT	$685	$712	$526	$608	$560
Depreciation	408	403	405	388	378
Gross cash flow	**$1,094**	**$1,115**	**$931**	**$996**	**$938**
Decrease (increase) in operating working capital	$(110)	$(9)	$172	$463	$131
Capital expenditures, net of disposals	(291)	(310)	(239)	31	(239)
Investment in capitalized operating leases	(450)	406	1,051	444	43
Investment in goodwill and acquired intangibles	723	(48)	552	656	708
Decrease (increase) in other operating assets, net other liabilities	59	(21)	(80)	(77)	(92)
Foreign currency translation	37	(127)	(403)	(132)	25
Gross investment	**$(31)**	**$(108)**	**$1,053**	**$1,385**	**$576**
Free cash flow	**$1,063**	**$1,006**	**$1,984**	**$2,381**	**$1,515**
% of revenue	*4.4%*	*4.4%*	*10.1%*	*12.7%*	*8.3%*

2.4.9.Analysis of Office Depot

Having conducted a full reorganization of Staples´ financial statements and further made necessary adjustments to portray a more precise measurement of Staples´s performance, the next step is to find a suitable comparable company, to benchmark Staples´ performance against. Looking at the comparable valuation, it was established that Office Depot was the most comparable peer in terms of both growth, profitability and returns. A deeper look into Office Depot's operation confirms the company´s many similarities to Staples.

Business profile:

Company:	Sector	Product and services	Customers	Distribution	Geography
Staples	**Sector:** Disbribution **Industry group:** Retail stores **Industry:** Miscellaneous store retailers **Sub-industry:** Office supplies	**Products:** Office supplies, electronics, furniture, other office related **Additional:** Finance center and additional services	**B2C:** Online and in-stores **B2B:** Mid-size businesses End-market and end-customers	**Suppliers:** Several vendors Next day delivery coverage, 95% NA Distribution support centers	**USA:** 47 states **Canada:** Each province
Office Depot	**Sector:** Disbribution **Industry group:** Retail stores **Industry:** Miscellaneous store retailers **Sub-industry:** Office supplies	**Products:** Office supplies, electronics, furniture, other office related	**B2C:** Online and in-stores **B2B:** Mid-size businesses End-market and end-customers	**Suppliers:** Several vendors Distribution support centers	**USA:** **Canada:** **Puerto Rico:**

Sources: Annual reports

Staples Inc. company overview: "*Staples, Inc., together with its subsidiaries, operates office products superstores. It operates in two segments, North American Delivery and North American Retail. The company sells its office products and services directly to businesses and consumers.*" (Company Overview of Staples, Inc., Bloomberg, 2018)

Office Depot, Inc. company overview: "*Office Depot, Inc., together with its subsidiaries, offer office supplies. It operates in three divisions: Retail, Business Solutions, and CompuCom. Office Depot, Inc. (Office Depot) is a global supplier of office products and services and solutions. The company offers its products through a wide network of distribution centers and cross-docks to small, medium and large enterprises alike.*" (Company Overview of Office Depot, Inc., Bloomberg, 2018)

Office Depot operates within the same sub-industry, delivers the same products and services, tends to the same type of customers, has the same distribution layout as well as the same geographical focus as Staples. What further support the comparableness of the two companies, was the reason for the Federal Trade Commission to sue both companies in 2015 following the proposed merger between them both. The case was based on an anti-trust lawsuit, stating *"combining them would effectively create just one dominant retailer focused on pens, paper clips and Post-it notes."* (de la Merced and Abrams, 2016). This lawsuit was later confirmed by a federal judge in 2016, resulting in both parties called off the merger in the same year.

Further does Office Depot divide its description of the operation into same categorizes as Staples, making the data available much more suitable for a benchmark analysis.

Looking upon the list of comparable companies, there were no other firms on the list with the same level of comparableness. Even though Barnes & Noble was the most comparable peer in terms of both leverage and coverage ratio, does the company differ in terms of its main operation, which revolves around selling books through retail stores. Same goes for both Best Buy and GameStop which both operates in different sub-industries compared to Staples.

Having established that Office Depot is the closest comparable peer, the next step is to reorganize the financial statements in the same manner as with Staples. This includes all adjustments made to both the balance sheet, income statement and cash flow statement. Down below is there a summary of the main adjustments made to both Staples and Office Depot, together with noticeable difference. The main reason for these differences is either a result of difference accounting practices between both companies, different past events and different line items.

Adjustments

Balance sheet adjustments	Adjustments	Noticable differences
Invested capital		
Operating working capital	Operating cash	
	Separation of other current liabilities	**Staples:** Taxes, Advertising and marketing
		Office Depot: Accrued pay-roll related amounts
Property, plant and equipment	No adjustments	
Capitalized operating lease	Based on 10.9 expected asset life	
	Cost of debt based on AA-rated bonds	
Capitalized intangible assets	Only include capitalized intangibles	**Office depot:** Capitalized software
Other operating assets	Adjusted for deferred tax	
	Operating deferred-tax assets is less carry forwards	
	Other assets includes reported deferred income tax	
	Other assets is less pension assets	
	Remaining other liabilities are included	
Non-operating assets	Carry forwards	
	Pension assets	
	Other	**Office depot:** Timber notes
Adjustments to goodwill and acquired intangible assets	Subtract defered tax liabilities	
	Add back cumulative amortization	**Office depot:** Only acquired intangibles, fair value adjustments to timber notes, no deffered tax.
Total invested funds		
Debt and its equivalents	Other current liabilites	**Office Depot:** No amount allocated to DDE
	Other long-term liabilities	**Office Depot:** No amount allocated to DDE
	Capitalized operation leases	
	Other	**Office depot:** Non-resource debt
Equity and its equivalents	Deferred tax	
	Other	**Staples:** Foreign currency adjustments

Income statement adjustments	Adjustments	Noticable differences
NOPLAT		
EBITA	Exclude non-operating line items	**Office depot:** Amortization on capitazlied software
	Add implied interest and pension adjustments	
Non-operating items	Eliminate non-operating items in COGS and SG&A	**Office depot:** Only unallocated cost
Operating cash tax	Adjust for operating cash tax	
Reconciliation with net income		
Net income adjusted	Operating deferred tax	
Non-operating items	Include all reported non-operating items	
Non-operating tax	Adjust for non-operating tax	
Other	Add implied interest and pension adjustments	

Tax adjustments	Adjustments	Noticable differences
Deferred income taxes		
Loss and credit carry foward	Net the carryforwards against the valuation allowance	
Operating deferred tax assets	Categorizing deferred tax items	**Office Depot:** Internal software
Non-operating deferred tax assets	Categorizing deferred tax items	
Intangible assets	Categorizing deferred tax items	**Office Depot:** No recodings
Operating Tax adjustments		
Marginal tax on EBITA	Operating tax rates	
Other operating tax	Other operating items	

Cash flow adjustments	Adjustments	Noticable differences
Gross cash flow	Add back non-cash operating expenses	**Office Depot:** amortization on capitalized software
Gross investment	Investment to IC	
	Foreign currency translation	

Office depot balance sheet adjustments

Invested capital

Recall that invested capital comprises of operating working capital and several fixed asset operating accounts. The operating working capital for Staples included accounts separated from other accrued expenses and other current liabilities. Same goes for Office Depot, but the information regarding accrued expense and other current liabilities was minor and only accrued pay-roll related amounts were included as current operating liability.
Both the property, plant and equipment together with capitalized operating lease underwent same adjustments as Staples. Same expected asset life was assumed for Office Depot´s leases and same cost of debt was used, as Office Depot had the same credit rating as Staples.

Office Depot has however capitalized software which is categorized as operating asset and not included in the goodwill adjustments. The adjustments to goodwill and acquired intangible asset do also differ as a result and does only include the portion of the intangibles less the capitalized software and the same goes for the cumulative amortization adjustment. Further are there not reported any deferred tax in relation to acquired intangibles, thus no adjustments to acquired intangibles for deferred tax were made.

The timber note, which is reported as a current asset, is a result of a prior sale of assets by OfficeMax which Office Depot acquired in 2013. The timber note represents credit-enhanced timber installment notes which are non-amortizing obligations bearing interest. This asset is deemed a marketable security and is categorized as a non-operating asset. The notes further underwent a fair value adjustment which increased the value of the asset in the reported statements. To account for this were the fair value adjustment added to the goodwill and intangible adjustments and the original principal value was added as the timber note to non-operating asset.

Total invested funds

The total invested funds comprise debt and its equivalents together with equity and its equivalents. While Staples had a lot of information regarding both other current liabilities and other non-current liabilities, did Office Depot not offer the same level of detail. Because of this, no separation could be made in a satisfying matter and are both included in the other-operating assets net of liabilities. This results in no allocation of these accounts to debt and its equivalents. Through the OfficeMax merger did Office Depot also acquirer a non-resource debt which has been included in the debt section.
In the equity and its equivalents includes the deferred tax liabilities which underwent the same procedure as for Staples. The only notable differences were the foreign currency adjustment added to Staples´ equity and preferred stock added to Office Depot´s equity.

Income statement adjustments

Staples´s non-operating items included in either COGS or SG&A included many different adjustments, but Office Depot did only include unallocated cost included in the SG&A. As Office depot has capitalized software, is the amortization of capitalized software extracted from EBITA. The remaining adjustments to NOPLAT and the reconciliation with net income had no noticeable difference compared to Staples. Same goes for pension adjustment, which did not have any noticeable difference adjustments.

Tax adjustments

Office depot had no recordings of deferred tax related to acquired intangibles but only for the capitalized software. This resulted in that no deferred tax were categorized as intangible assets, tax gross-up for the adjustment to goodwill and acquired intangible assets. The reported deferred tax related to the capitalized software was categorized as an operating deferred tax liability instead.

Cash flow adjustments

The only noticeable difference regarding the cash flow, was adding back the amortization on capitalized software as a non-cash operating expense.

Below are the reorganized statements shown. The tables containing the individual adjustments are in the appendix 8.

Reorganized balance sheet

Fundamental analysis - Reorganized statements

($ in millions)

Total funds invested: Uses	2011	2012	2013	2014	2015	2016
Operating Cash	$230	$214	$225	$254	$235	$220
Receivables, net	863	804	1,333	1,264	746	687
Inventories	1,147	1,051	1,812	1,638	1,406	1,279
Prepaid Expenses and other current assets	164	171	296	158	92	102
Operating current assets	**$2,403**	**$2,240**	**$3,666**	**$3,314**	**$2,479**	**$2,288**
Trade accounts payable	$994	$935	$1,426	$1,340	$987	$893
Income taxes payable	7	5	4	4	9	3
Accrued pay-roll related amounts(1)	262	204	319	343	221	176
Operating current liabilities	**$1,263**	**$1,144**	**$1,749**	**$1,687**	**$1,217**	**$1,072**
Operating working capital	$1,140	$1,096	$1,917	$1,627	$1,262	$1,216
Property and Equipment, net	889	690	1,073	815	569	512
Capitalized operating leases(2)	3,232	3,335	3,496	4,640	3,994	3,846
Intangible assets, capitalized software	178	166	236	148	96	89
Other operating assets, net other liabilities(3)	(665)	(611)	(1,456)	(1,252)	(878)	(1,345)
Invested capital (excluding goodwill)	**$4,775**	**$4,676**	**$5,266**	**$5,978**	**$5,043**	**$4,318**
Goodwill and acquired intangibles, less tax gross-up(4)	$97	$81	$638	$571	$503	$463
Cumulative amortization and impairment(4)	1,155	1,196	1,261	1,207	1,210	1,185
Invested capital (including goodwill)	**$6,027**	**$5,952**	**$7,165**	**$7,756**	**$6,756**	**$5,966**
Excess cash	$341	$457	$730	$817	$625	$543
Timber notes(5)	-	-	818	818	818	818
Current assets of discontinued operations	-	-	-	-	956	142
Non-current assets of discontinued operations	-	-	-	-	182	-
Loss and credit carryforwards, net of taxes(6)	(228)	(208)	(135)	(236)	(220)	332
Overfunded pension(7)	-	8	8	18	30	48
Total non-operating assets	**$112**	**$257**	**$1,421**	**$1,417**	**$2,391**	**$1,883**
Total funds invested	**$6,139**	**$6,209**	**$8,586**	**$9,173**	**$9,147**	**$7,849**
Total funds invested: sources	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Short-term borrowings and current maturities of long-term debt	$36	$174	$29	$32	$51	$29
Long-term debt, net of current maturities	648	485	696	670	628	358
Non-recourse debt(8)	-	-	859	839	819	798
Pension and postretirement obligations, net	-	3	163	196	182	140
Capitalized operating leases(2)	3,232	3,335	3,496	4,640	3,994	3,846
Current liabilities of discontinued operations	-	-	-	-	622	104
Non-current liabilities of discontinued operations	-	-	-	-	46	-
Debt and debt equivalents	**$3,917**	**$3,997**	**$5,243**	**$6,377**	**$6,342**	**$5,275**
Deferred tax assets (liabilities), operating(6)	$(225)	$(218)	$(271)	$(300)	$(235)	$(191)
Deferred tax assets (liabilities), non-operating(6)	190	187	235	268	227	(272)
Cumulative amortization and impairment	1,155	1,196	1,261	1,207	1,210	1,185
Shareholders equity	739	662	2,064	1,621	1,603	1,852
Noncontrolling Interest (in joint venture)	-	-	54	-	-	-
Redeemable Preferred Stock, net	364	386	-	-	-	-
Equity and equity equivalents	**$2,222**	**$2,213**	**$3,343**	**$2,796**	**$2,805**	**$2,574**
Total funds invested	**$6,139**	**$6,209**	**$8,586**	**$9,173**	**$9,147**	**$7,849**

(1) Accrued Expenses and other current liabilities specification
(2) Detailed in capitalized lease
(3) Detailed in other operating assets, net other liabilities
(4) Detailed in adjustment to Goodwill and Acquired intangibles
(5) Acquired marketable security from OfficeMax
(6) Detailed in reorganized deferred income taxes
(7) Detailed in other assets
(8) Acquired non-resource debt from OfficeMax

NOPLAT calculation

Fundamental analysis - Reorganized statements

($ in millions)

	2012	2013	2014	2015	2016
Sales	**$10,696**	**$11,242**	**$12,710**	**$11,727**	**$11,021**
Sales growth	*(6.9%)*	*5.1%*	*13.1%*	*(7.7%)*	*(6.0%)*
COGS	$8,160	$8,616	$9,734	$8,864	$8,313
SG&A	2,237	2,351	2,456	2,172	2,061
Depreciation(1)	152	149	183	172	124
Amortization of capitalized software(1)	46	56	76	67	47
Impied interest, capitalized operating lease (2)	216	230	237	308	255
Pension adjustments(3)	2	4	4	5	3
EBITA	**$(117)**	**$(164)**	**$20**	**$139**	**$218**
Unallocated expenses	$74	$89	$124	$101	$99
Total non-operating items(4)	**$74**	**$89**	**$124**	**$101**	**$99**
Adjusted EBITA	**$(43)**	**$(75)**	**$144**	**$240**	**$317**
% of revenue	*(0.4%)*	*(0.7%)*	*1.1%*	*2.0%*	*2.9%*
Operating cash taxes(5)	$(33)	$(7)	$84	$33	$53
Operating cash tax rate	*77.8%*	*9.1%*	*58.3%*	*13.7%*	*16.6%*
NOPLAT	**$(9)**	**$(68)**	**$60**	**$207**	**$264**
% of revenue	*(0.1%)*	*(0.6%)*	*0.5%*	*1.8%*	*2.4%*
Reconciliation with net income					
Net (loss) income	**-$77**	**-$20**	**-$354**	**$8**	**$529**
Decrease (increase) in operatieng deferred taxes(6)	7	(53)	(29)	65	44
Adjusted net income	**-$70**	**-$73**	**-$383**	**$73**	**$573**
Amortization cost, acquired intangibles	$(5)	$(4)	$(18)	$(14)	$(10)
Recovery of purchase price	68	-	-	-	-
Asset impairments	(139)	(70)	(56)	(13)	(15)
Merger, restructuring, and other operating inc./(exp.),	(56)	(201)	(334)	(242)	80
Legal accrual	-	-	(81)	-	-
Interest Income	2	5	22	22	22
Interest Expense	(69)	(69)	(87)	(91)	(80)
Loss on extinguishment of debt	(12)	-	-	-	(15)
Gain on disposition of joint venture	-	382	-	-	-
Other income / (exp), net	35	14	2	1	1
Discontinued operations, net of tax	-	-	(59)	(84)	(150)
Noncontrolling Interest	-	-	(2)	-	-
Impied interest, capitalized operating lease (2)	216	230	237	308	255
Pension adjustments(3)	2	4	4	5	3
Total	**$42**	**$291**	**$(372)**	**$(108)**	**$91**
Non-operating taxes(5)	**$28**	**$207**	**$(53)**	**$(75)**	**$(317)**
Total non-operating items(4)	**$74**	**$89**	**$124**	**$101**	**$99**
NOPLAT	**$(9)**	**$(68)**	**$60**	**$207**	**$264**

(1) Assumes the depreication and amortization are included in SG&A. SG&A is adjusted for this
(2) Detailed in operating leases
(3) Detailed in pension adjustments
(4) Expenses not allocated to division but managed at coporate level
(5) Detailed in tax adjustments
(6) Detailed in reorganized deferred income taxes

Cash flow statement

Fundamental analysis - Reorganized statements

($ in millions)

	2012	2013	2014	2015	2016
NOPLAT	$(9)	$(68)	$60	$207	$264
Depreciation	152	149	183	172	124
Amortization of capitalized software	46	56	76	67	47
Gross cash flow	**$189**	**$137**	**$319**	**$446**	**$435**
Decrease (increase) in operating working capital	$44	$(821)	$290	$366	$45
Capital expenditures, net of disposals	351	(234)	441	418	181
Capitalized software	58	(14)	164	119	54
Investment in capitalized operating leases	(102)	(162)	(1,143)	645	149
Investment in goodwill and acquired intangibles	21	(553)	85	82	50
Decrease (increase) in other operating assets, net other liabilities	(54)	845	(204)	(374)	467
Foreign currency translation	(34)	47	(78)	(78)	(175)
Gross investment	**$284**	**$(891)**	**$(446)**	**$1,178**	**$771**
Free cash flow	**$473**	**$(755)**	**$(127)**	**$1,624**	**$1,206**
% of revenue	*4.4%*	*(6.7%)*	*(1.0%)*	*13.8%*	*10.9%*

2.4.10.Analyzing the performance

"*A good analysis will focus on the key drivers of value: ROIC, revenue growth and FCF*" (Koller et al., 2015).

As discussed previously the main goal of the fundamental analysis is to analysis the value creation of the company. This value creation is generated from either ROIC performance or/and revenue growth. The reorganizing of Staples´ financial statements, the establishing of Office Depot as the closest peer and the reorganized of Office Depot´s financial statements, will provide the necessary information to conduct an analysis of ROIC.

The ROIC analysis will be followed up by a revenue analysis focusing on decomposition revenue growth and how Staples´ revenue is channeling through to its customers compared to Office Depot.

2.4.11.Analysis of ROIC

The ROIC is the return on the invested capital and a measurement for the company´s operational performance for the entire enterprise. The reason for using ROIC as a measurement the operational performance and not ROA or ROE, is because ROA includes non-operating assets and does not include operational liabilities, while ROE is affected by the capital structure of the company (Koller et al., 2015).

The analysis will focus on ROIC with and without goodwill and how the components of ROIC can be viewed as an integrated view of the company´s performance and get to understand what aspect of the operation is either performing or underperforming. The ROIC is calculated by:

$$\text{ROIC} = \frac{\text{NOPLAT}}{\text{Ave. Invested Capital}}$$

As the NOPLAT is based on an entire year of performance, using the average of the invested capital is more appropriate to depict the performance. As described before, does the ROIC with goodwill, measure if the company does deliver adequate returns, factoring in the price paid for acquisitions, while ROIC without goodwill, measures the company´s underlying operational performance and will be the primary measurement used to compare.

The ROIC can further be split into two ratios, operational margin and capital turnover which both are affected by the operating cash tax rate extracted from the NOPLAT calculation.

$$\text{ROIC} = (1 - \text{Operating cash tax rate}) * \frac{\text{EBITA}}{\text{Revenues}} * \frac{Revenues}{Invested\ Capital}$$

This is a powerful tool and will help to understand if either the ability to maximize profitability or optimize capital turnover drives the ROIC performance. Each of these can further be disaggregated into sub performance measures.

Down below are an overview of the calculation of ROIC, operating margin and capital turnover and the decomposition of each performance measure.

ROIC calculation

Fundamental analysis - ROIC

($ in millions)

	Staples							Office Depot						
	2012	2013	2014	2015	2016	Average	Std.dev	2012	2013	2014	2015	2016	Average	Std.dev
NOPLAT	$685	$712	$526	$608	$560	$618	$71	$(9)	$(68)	$60	$207	$264	$91	$126
Ave. IC (including goodwill)	$14,590	$14,549	$13,806	$12,044	$11,402	$13,278	$1,316	$5,990	$6,559	$7,460	$7,256	$6,361	$6,725	$552
ROIC, (including goodwill)	4.7%	4.9%	3.8%	5.1%	4.9%	4.7%	0.4%	(0.2%)	(1.0%)	0.8%	2.8%	4.2%	1.3%	1.9%
Goodwill	$4,279	$4,281	$4,427	$3,943	$4,036	$4,193	$177	$1,264	$1,588	$1,838	$1,746	$1,681	$1,623	$197
Goodwill % of capital	29.3%	29.4%	32.1%	32.7%	35.4%	31.8%	2.3%	21.1%	24.2%	24.6%	24.1%	26.4%	24.1%	1.7%
NOPLAT	$685	$712	$526	$608	$560	$618	$71	$(9)	$(68)	$60	$207	$264	$91	$126
Ave. IC (excluding goodwill)	$10,312	$10,268	$9,380	$8,101	$7,366	$9,085	$1,176	$4,725	$4,971	$5,622	$5,510	$4,680	$5,102	$393
ROIC, (excluding goodwill)	6.6%	6.9%	5.6%	7.5%	7.6%	6.9%	0.7%	(0.2%)	(1.4%)	1.1%	3.8%	5.6%	1.8%	2.6%
Operating cash tax rate	44.7%	18.4%	18.6%	16.5%	25.5%	24.7%	10.4%	77.8%	9.1%	58.3%	13.7%	16.6%	35.1%	27.7%
EBITA	$1,238	$873	$647	$728	$753	$848	$208	$(43)	$(75)	$144	$240	$317	$116	$154
Ave. IC (excluding goodwill)	$10,312	$10,268	$9,380	$8,101	$7,366	$9,085	$1,176	$4,725	$4,971	$5,622	$5,510	$4,680	$5,102	$393
Pretax ROIC	12.0%	8.5%	6.9%	9.0%	10.2%	9.3%	1.7%	(0.9%)	(1.5%)	2.6%	4.3%	6.8%	2.3%	3.1%
Decomposition of ROIC														
Operating margin	*5%*	*4%*	*3%*	*4%*	*4%*	*4%*	*1%*	*(0%)*	*(1%)*	*1%*	*2%*	*3%*	*1%*	*1%*
Capital turnover	*2.36*	*2.25*	*2.10*	*2.32*	*2.48*	*2.30*	*0.13*	*2.26*	*2.26*	*2.26*	*2.13*	*2.35*	*2.25*	*0.07*
Pretax ROIC = (Ope.margin x Cap.turnover)	*12.0%*	*8.5%*	*6.9%*	*9.0%*	*10.2%*	*9.3%*	*1.7%*	*-0.9%*	*-1.5%*	*2.6%*	*4.3%*	*6.8%*	*2.2%*	*3.1%*
Operating cash tax rate	*45%*	*18%*	*19%*	*16%*	*26%*	*25%*	*10%*	*78%*	*9%*	*58%*	*14%*	*17%*	*35%*	*28%*
ROIC,(ex.goodwill) = (1-Ope.cash tax rate)*Pretax ROIC	*6.6%*	*6.9%*	*5.6%*	*7.5%*	*7.6%*	*7.0%*	*0.7%*	*-0.2%*	*-1.4%*	*1.1%*	*3.8%*	*5.6%*	*1.5%*	*2.6%*
Goodwill % of capital	*29%*	*29%*	*32%*	*33%*	*35%*	*32%*	*2%*	*21%*	*24%*	*25%*	*24%*	*26%*	*24%*	*2%*
ROIC,(inc.goodwill) = (1-goodwill % of cap.)*ROIC(ex.goodwill)	*4.7%*	*4.9%*	*3.8%*	*5.1%*	*4.9%*	*4.8%*	*0.4%*	*-0.2%*	*-1.0%*	*0.8%*	*2.8%*	*4.2%*	*1.1%*	*1.9%*

Operating margin

Fundamental analysis - ROIC

($ in millions)

	Staples							Office Depot						
	2012	2013	2014	2015	2016	Average	Std.dev	2012	2013	2014	2015	2016	Average	Std.dev
EBITA	$1,238	$873	$647	$728	$753	$848	$208	$(43)	$(75)	$144	$240	$317	$116	$154
Revenue	$24,381	$23,114	$19,684	$18,764	$18,247	$20,838	$2,453	$10,696	$11,242	$12,710	$11,727	$11,021	$11,479	$701
Operating margin	5.1%	3.8%	3.3%	3.9%	4.1%	4.0%	0.6%	(0.4%)	(0.7%)	1.1%	2.0%	2.9%	1.0%	1.4%
COGS	$17,889	$17,082	$14,646	$13,857	$13,489	$15,393	$1,768	$8,160	$8,616	$9,734	$8,864	$8,313	$8,737	$555
Revenue	$24,381	$23,114	$19,684	$18,764	$18,247	$20,838	$2,453	$10,696	$11,242	$12,710	$11,727	$11,021	$11,479	$701
COGS/Revenue	73.4%	73.9%	74.4%	73.8%	73.9%	73.9%	0.3%	76.3%	76.6%	76.6%	75.6%	75.4%	76.1%	0.5%
SG&A	$4,476	$4,332	$3,691	$3,605	$3,467	$3,914	$409	$2,237	$2,351	$2,456	$2,172	$2,061	$2,255	$137
Revenue	$24,381	$23,114	$19,684	$18,764	$18,247	$20,838	$2,453	$10,696	$11,242	$12,710	$11,727	$11,021	$11,479	$701
SG&A/Revenue	18.4%	18.7%	18.8%	19.2%	19.0%	18.8%	0.3%	20.9%	20.9%	19.3%	18.5%	18.7%	19.7%	1.0%
D&A	$408	$403	$405	$388	$378	$396	$12	$198	$205	$259	$239	$171	$214	$31
Revenue	$24,381	$23,114	$19,684	$18,764	$18,247	$20,838	$2,453	$10,696	$11,242	$12,710	$11,727	$11,021	$11,479	$701
D&A/Revenue	1.7%	1.7%	2.1%	2.1%	2.1%	1.9%	0.2%	1.9%	1.8%	2.0%	2.0%	1.6%	1.9%	0.2%
Other operating expenses	$370	$424	$295	$186	$160	$287	$102	$144	$145	$117	$212	$159	$156	$32
Revenue	$24,381	$23,114	$19,684	$18,764	$18,247	$20,838	$2,453	$10,696	$11,242	$12,710	$11,727	$11,021	$11,479	$701
Other operating expenses / Revenue	1.5%	1.8%	1.5%	1.0%	0.9%	1.3%	0.4%	1.3%	1.3%	0.9%	1.8%	1.4%	1.4%	0.3%
Decomposition of Operating margin														
COGS/Revenue	*73.4%*	*73.9%*	*74.4%*	*73.8%*	*73.9%*	*73.9%*	*0.3%*	*76.3%*	*76.6%*	*76.6%*	*75.6%*	*75.4%*	*76.1%*	*0.5%*
SG&A/Revenue	*18.4%*	*18.7%*	*18.8%*	*19.2%*	*19.0%*	*18.8%*	*0.3%*	*20.9%*	*20.9%*	*19.3%*	*18.5%*	*18.7%*	*19.7%*	*1.0%*
D&A/Revenue	*1.7%*	*1.7%*	*2.1%*	*2.1%*	*2.1%*	*1.9%*	*0.2%*	*1.9%*	*1.8%*	*2.0%*	*2.0%*	*1.6%*	*1.9%*	*0.2%*
Other operating expenses / Revenue	*1.5%*	*1.8%*	*1.5%*	*1.0%*	*0.9%*	*1.3%*	*0.4%*	*1.3%*	*1.3%*	*0.9%*	*1.8%*	*1.4%*	*1.4%*	*0.3%*
Total	*94.9%*	*96.2%*	*96.7%*	*96.1%*	*95.9%*	*96.0%*	*0.6%*	*100.4%*	*100.7%*	*98.9%*	*98.0%*	*97.1%*	*99.0%*	*1.4%*
Operating margin = (100% - Total)	*5.1%*	*3.8%*	*3.3%*	*3.9%*	*4.1%*	*4.0%*	*0.6%*	*(0.4%)*	*(0.7%)*	*1.1%*	*2.0%*	*2.9%*	*1.0%*	*1.4%*

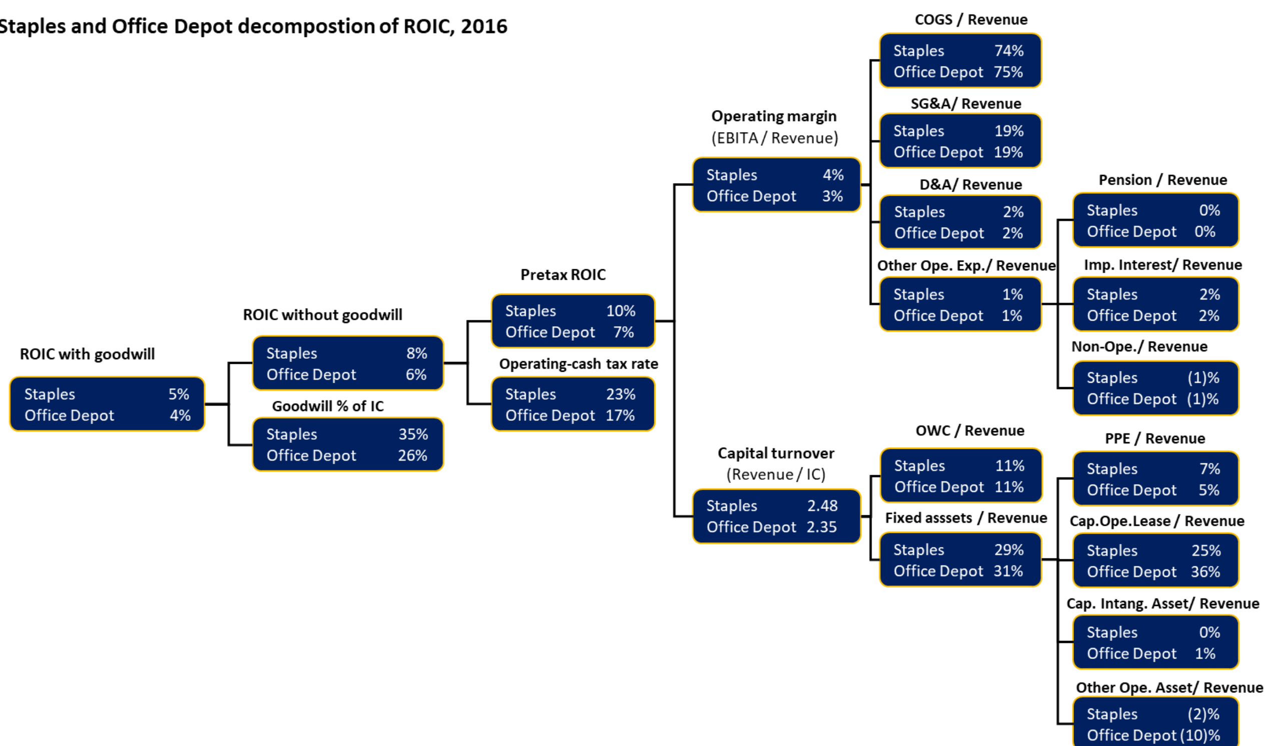
Capital turnover

Fundamental analysis - ROIC

($ in millions)

	Staples							Office Depot						
	2012	2013	2014	2015	2016	Average	Std.dev	2012	2013	2014	2015	2016	Average	Std.dev
Revenue	$24,381	$23,114	$19,684	$18,764	$18,247	$20,838	$2,453	$10,696	$11,242	$12,710	$11,727	$11,021	$11,479	$701
Invested capital (excluding goodwill)	$10,312	$10,268	$9,380	$8,101	$7,366	$9,085	$1,176	$4,725	$4,971	$5,622	$5,510	$4,680	$5,102	$393
Capital turnover	2.36	2.25	2.10	2.32	2.48	2.30	0.13	2.26	2.26	2.26	2.13	2.35	2.25	0.07
Operating working capital	$2,627	$2,686	$2,605	$2,288	$1,991	$2,439	$264	$1,118	$1,506	$1,772	$1,444	$1,239	$1,416	$226
Revenue	$24,381	$23,114	$19,684	$18,764	$18,247	$20,838	$2,453	$10,696	$11,242	$12,710	$11,727	$11,021	$11,479	$701
OWC/Revenue	10.8%	11.6%	13.2%	12.2%	10.9%	11.7%	0.9%	10.5%	13.4%	13.9%	12.3%	11.2%	12.3%	1.3%
Fixed assets	$7,685	$7,582	$6,775	$5,813	$5,375	$6,646	$925	$3,607	$3,464	$3,850	$4,066	$3,441	$3,686	$239
Revenue	$24,381	$23,114	$19,684	$18,764	$18,247	$20,838	$2,453	$10,696	$11,242	$12,710	$11,727	$11,021	$11,479	$701
Fixed asset / Revenue	31.5%	32.8%	34.4%	31.0%	29.5%	31.8%	1.7%	33.7%	30.8%	30.3%	34.7%	31.2%	32.1%	1.7%
Decomposition of Capital turnover														
OWC/Revenue	*10.8%*	*11.6%*	*13.2%*	*12.2%*	*10.9%*	*11.7%*	*0.9%*	*10.5%*	*13.4%*	*13.9%*	*12.3%*	*11.2%*	*12.3%*	*1.3%*
Fixed asset / Revenue	*31.5%*	*32.8%*	*34.4%*	*31.0%*	*29.5%*	*31.8%*	*1.7%*	*33.7%*	*30.8%*	*30.3%*	*34.7%*	*31.2%*	*32.1%*	*1.7%*
Total	*42.3%*	*44.4%*	*47.7%*	*43.2%*	*40.4%*	*43.6%*	*2.4%*	*44.2%*	*44.2%*	*44.2%*	*47.0%*	*42.5%*	*44.4%*	*1.5%*
Capital turnover = 1/Total	*2.36*	*2.25*	*2.10*	*2.32*	*2.48*	*2.29*	*0.13*	*2.26*	*2.26*	*2.26*	*2.13*	*2.35*	*2.25*	*0.07*

The tables show the calculations of each individual component in the disaggregation of ROIC. Further does the averages and standard deviations summaries the last 5 years performance. Each table are structure, so the top half represents the direct calculations and the lower half represents how the performance measures are inter-linked with each other. To establish as better overview a performance measure tree was made for 2016.



This tree shows how one can split ROIC into different aspects of the operation and how to dissect the performance of a particular company.

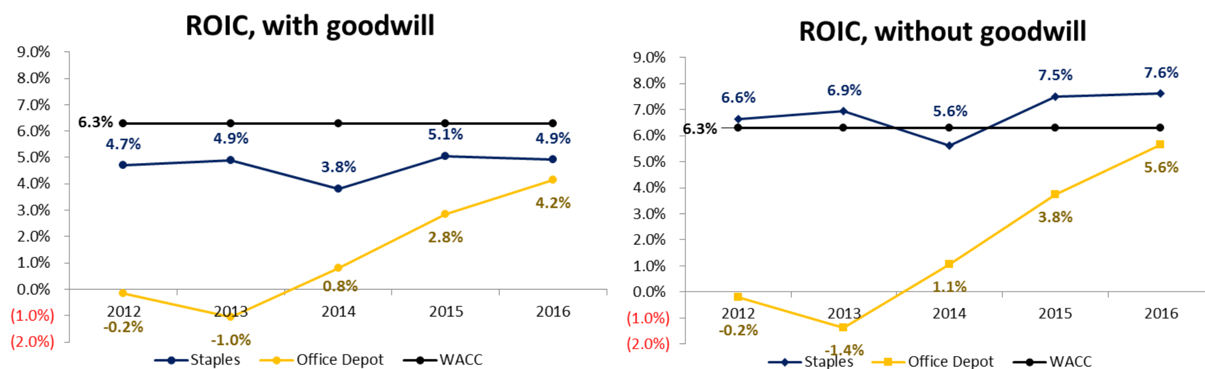
Comparing ROIC with and without goodwill shows that Staples is delivering better returns with and without goodwill. Staples does however have a considerable larger amount of goodwill relative to invested capital compared to Office Depot. Looking at how much the ROIC fall after including the goodwill, shows that Staples ROIC falls more than Office Depots, when factoring in the acquisition premium price.

The pretax ROIC shows that Staples is out performing Office Depot pretax even though Office Depot has a lower operating cash tax rate. The low tax rate for Office Depot is a result of negative result in the previous yes, resulting in an increase in the operating deferred tax, that in 2015 and 2016 reduced the operating cash tax considerable.

Pretax ROIC comprises of two components operating margin and capital turnover. In both aspect of the operation does Staples outperform Office Depot. The operating margin measures the company´s level of profitability, in other words, how much the company earns on one dollar of sales after variable cost. The higher operating margin for Staples stems from a better lower use of COGS compared to Office Depot. This can be seen as a strength, as Staples seems more capable of reducing the amount of COGS to sustain the current sales. In further support of these claims, is the standard deviation of the COGS ratio, which is below zero for Staples and above one for Office Depot, indicating a less volatile operation for Staples. This could however also be a result of Office Depot´s merger with OfficeMax in 2013. Looking at the capital turnover, which represent the company´s ability to utilize its invested capital to generate sales, Staples is again outperforming Office Depot. This difference stems from Staples ability to utilize the fixed asset portion of the invested capital more efficient. Looking at the further disaggregation of fixed asset to revenue shows that

even though Office depot is performing better in terms of PPE, does Staples outperform Office depot with a considerable amount in terms of capitalized operating lease. Further does the other net operating asset affect the capital turnover. The big difference might, however come from the low level of disaggregation of the other current and non-current liabilities included in the other net operating asset in Office Depots case. The main point should be that Staples capital turnover is higher due to a better ability to utilize capitalized operation leases.

Overall is Staples in a much better position than Office Depot, which could indicate that advantage of scale in the retail business. The lower COGS to revenue might indicate a more efficient distribution network and a better management of variable cost. The lower capitalized operating lease to revenue shows a stronger lease practice and management in Staples. These two aspects of Staples are considered strengths. A weakness for Staples could be the higher PPE to revenue, indicating a low level of utility for owned fixed operating assets. This will however not be considered a significant weakness and not be considered later on. Having focused only on 2016, it could have been argued to look at the averages instead of 2016 numbers. But, because of Office Depot´s merger with OfficeMax in 2013 will the averages are understating Office Depots 2016 position. For instance, is the average ROIC including goodwill 1% while it was 4% in 2016.



The two tables above show how the ROIC compare with each other over time, with and without goodwill. The WACC of 6.3% is taken from NYU sterns dataset “Cost of equity and capital”, based on the industry retail (Special Lines) (Damodaran; 2018). This WACC is based on data from 2017. The ROIC with goodwill representing accounting for acquisition premiums shows that both Staples and Office Depot is below the WACC. This explains the reducing in invested capital over the past years as the level of ROIC is value destroying instead of value creating. The ROIC without goodwill represents the underlying performance of the operation after premiums. After the removal of the premiums is Staples ROIC above the WACC. This indicate that Staples is performing above its cost of capital based on the underlying operational performance, but below when factoring in the premium’s prices of prior acquisitions. Office Depot are in both cases below. The increase in ROIC of Office Depot is connected with the merger with OfficeMax in 2013, and is a result of improved operational margins for COGS and SG&A

To channel the findings of ROIC into a more tangible result, an understanding of what can potential drive improvements in ROIC is necessary. ROIC can be improved upon from either charging price premiums or produce its products more efficiently (Koller et al., 2015). The price premiums represent the company´s ability to sell products at premiums and must find ways to differentiated themselves to do so (Koller et al., 2015). This includes Innovative products, quality, brand, customer lock-in and rational price discipline. Considerations regarding price premiums is more fittingly discussed in the strategic analysis.

The cost and capital efficiency represent two kind of efficiencies, cost efficiency, which is the ability to sell products at lower prices than the competition, while capital efficiency is selling more products per dollar of invested capital than the competition (Koller et al., 2015). This can be directly related to the two main

segments of ROIC calculated before, operating margin and capital turnover, but sometimes it can be hard to separate the two kinds of efficiencies which is why, four categorizes of cost and capital efficiency helps to understand what kind of competitive advantage the company is able to execute - Innovative business method, unique resources, economic of scale and scalable product/process (Koller et al., 2015). The innovative business method, which describes a difficult-to-copy business method is the most descriptive of Staples´ advantage. The innovative business method describes how a company combines its production, logistics and interaction with customers on a more efficient level. In Staples case, is Staples able to leverage its distribution network, and thus improving the operating margin through reducing COGS. Looking at line item analysis for working capital shows that the average days inventory sales (DSI) is considerable lower for Staples compared to Office Depot.

Line item analysis - day sales
Fundamental analysis - ROIC
(Day sales)

	Staples							Office Depot						
	2012	2013	2014	2015	2016	Average	Std.dev	2012	2013	2014	2015	2016	Average	Std.dev
Operating Cash,	7.3	7.5	7.9	7.5	7.4	7.5	0.2	7.6	7.1	6.9	7.6	7.5	7.3	0.3
Receivables, net (DSO)	28.8	28.9	34.9	33.8	30.8	31.4	2.5	28.4	34.7	37.3	31.3	23.7	31.1	4.7
Inventories (DSI)	35.5	36.7	41.5	38.3	35.3	37.4	2.3	37.5	46.5	49.5	47.4	44.5	45.1	4.1
Prepaid Expenses and other current assets,	4.5	5.9	6.1	5.1	5.2	5.4	0.6	5.7	7.6	6.5	3.9	3.2	5.4	1.6
Operating current assets	**76.2**	**78.9**	**90.4**	**84.6**	**78.7**	**81.8**	**5.1**	**79.2**	**95.9**	**100.2**	**90.1**	**78.9**	**88.9**	**8.6**
	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trade accounts payable(DPO)	42.0	41.6	48.1	46.8	45.9	44.9	2.6	43.1	50.0	51.9	47.9	41.3	46.8	4.0
Other current liabilities(1)	33.0	30.7	33.4	29.1	26.4	30.5	2.6	39.0	41.3	49.8	48.5	36.2	43.0	5.3
Operating current liabilities	**74.9**	**72.3**	**81.5**	**75.9**	**72.3**	**75.4**	**3.4**	**82.2**	**91.3**	**101.6**	**96.4**	**77.5**	**89.8**	**8.9**
	-	-	-	-	-	-	-							
Operating working capital (2)	**67.7**	**69.5**	**74.4**	**71.0**	**70.7**	**70.7**	**2.2**	**79.0**	**74.5**	**69.0**	**72.0**	**70.1**	**72.9**	**3.6**
Cash conversion cycle (CCC) = DSO+DSO-DPO	**22.3**	**23.9**	**28.2**	**25.3**	**20.2**	**24.0**	**2.7**	**22.8**	**31.2**	**35.0**	**30.7**	**26.9**	**29.3**	**4.1**

**DSO = Days sales outstanding, 365*(Ave.Receivables/Revenue)*
**DSI = Days sales inventory, 365*(Ave.Inventory/Revenue)*
**DPO = Days payable outstanding, 365*(Ave.Trade payable/Revenue)*
(1) 365(Ave. Other currnt liabilites/SG&A)*
(2) 365(Ave. OWC/Revenue)*

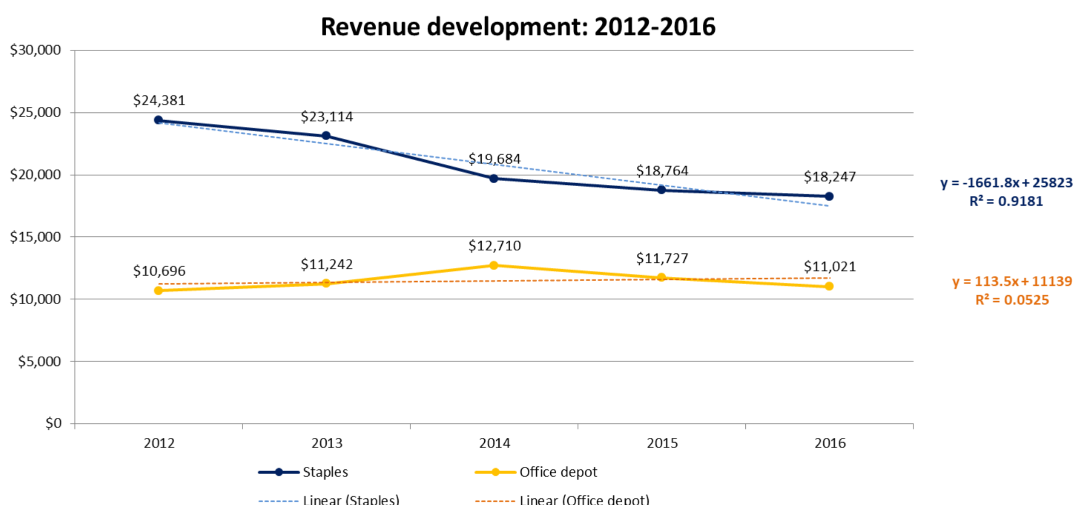
Gather from NYU Sterns database for industry specific "key working capital numbers as a percent of sales" for 2016, the industry specification retail (special lines), of which includes Office Depot, states that industry average DSI based on sales is 47.1 days (Damodaran, 2017). Staples´ number is almost 10 days lower, proving a competitive advantage in terms of inventory efficiency, which is a result of their excellent distribution network. As they state in their annual report from 2016, *"Our retail distribution centers provide us with significant labor and merchandise (inventory) cost savings by centralizing receiving and handling functions, and by enabling us to purchase in full truckloads and other economically efficient quantities from suppliers." (Staples, Inc., Annual report, 2016, supply chain)*

The conclusion for the ROIC analysis is that Staples is running a capable operation compared to its closest peer and has a competitive advantage in terms of its cost and capital efficient distribution network and an excellent lease practice.

2.4.12. Growth analysis

The growth analysis will focus on the revenue development, the b2b segment, the b2c segment and by product line.

The revenue development of Staples over the last five years has been in decline, while Office Depots has been affected by the merger with OfficeMax in 2013 and 2014, but has been in decline since 2014. This shift in revenue development is the reason for the low R^2 for the trend line.



As described before, do both Staples and Office Depot segment their operation in equal manners, as such that, both separate the operation into a B2C segment and a B2B segment. Given that Office Depot underwent a merger in 2013 is an adjustment necessary for determine organic growth. In 2013 and 2014 was the revenue contribution from OfficeMax reported in the annual reports. The 2014 revenue contribution was then hold constant for the remaining years in the analysis. The table below shows how the **B2B** segment of the both companies has evolved for the last 4 years, and how the B2B segment contribution to the total revenue has evolved. The percentage of total revenue is including the OfficeMax contribution. What is evident is the how much the OfficeMax merger has contributed to the revenue in the B2B segment. The average revenue growth rate has fallen from 17.4% to (4.6%) for Office Depot. In Staples´s case is the revenue growth almost static. The percentage of total revenue does for both companies increase steady. Overall a static revenue growth in the segment for Staples and a trend of increasing revenue contribution from the B2B segment for both companies.

Revenue analysis - B2B
Fundamental analysis - ROIC
($ in millions)

	Staples						Office Depot					
	2013	2014	2015	2016	Average	Std.dev	2013	2014	2015	2016	Average	Std.dev
Reported B2B revenue	$8,042	$8,271	$8,361	$8,269	$8,236	$118	$3,595	$6,088	$5,711	$5,400	$5,199	$957
Office max contribution(1)	-	-	-	-	-	-	$422	$2,759	$2,759	$2,759	$2,175	$1,012
B2B revenue, net Officemax	**$8,042**	**$8,271**	**$8,361**	**$8,269**	**$8,236**	**$118**	**$3,173**	**$3,329**	**$2,952**	**$2,641**	**$3,024**	**$258**
Of total revenue, %	**42.0%**	**44.2%**	**46.7%**	**47.8%**	**45.2%**	**2.3%**	**43.6%**	**47.9%**	**48.7%**	**49.0%**	**47.3%**	**2.2%**
Growth rates												
Consolidated revenue growth, %	(0.8%)	2.8%	1.1%	(1.1%)	0.5%	1.6%	11.7%	69.3%	(6.2%)	(5.4%)	17.4%	30.9%
Organic revenue growth, %	**(0.8%)**	**2.8%**	**1.1%**	**(1.1%)**	**0.5%**	**1.6%**	**(1.4%)**	**4.9%**	**(11.3%)**	**(10.5%)**	**(4.6%)**	**6.7%**

(1) assumed the contribution to revenue from the merger with Officemax is constant after 2014

The **B2C** segment represents the physical retail stores in North America. Again, have there been made adjustments for the OfficeMax merger, to extract the organic growth. The tables show the dollar amount for the relevant categories, before and after the OfficeMax impact, growth rates for the organic developments, ratios in dollar amount and organic growth rates for the ratios.

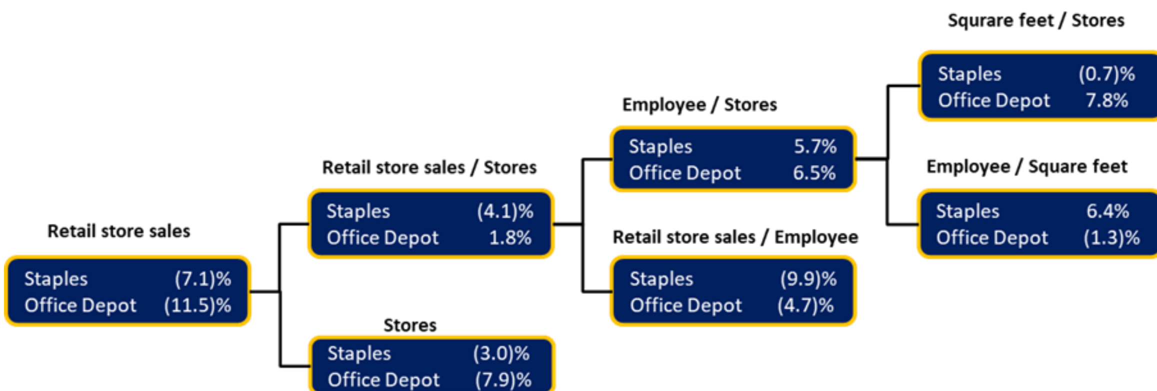
Revenue analysis - B2C, organic

Fundamental analysis - Revenue analysis

($ in millions, except stores and employees, square feet in millions)

	Staples						Office Depot					
	2013	2014	2015	2016	Average	Std.dev	2013	2014	2015	2016	Average	Std.dev
Retail store sales	$8,870	$8,055	$7,169	$6,658	$7,688	$846	$4,614	$6,528	$6,004	$5,603	$5,687	$701
Square feet, millions	36,328	32,236	31,854	30,693	32,778	2,127	43,643	39,615	35,400	32,400	37,764	4,253
Stores	1,846	1,679	1,607	1,559	1,673	109	1,912	1,745	1,564	1,441	1,666	179
Employees	83,008	79,075	75,371	77,440	78,724	2,800	64,000	56,000	49,000	38,000	51,750	9,549
Org.rev - Retail store sales(1)	**$8,870**	**$8,055**	**$7,169**	**$6,658**	**$7,688**	**$846**	**$4,230**	**$4,002**	**$3,478**	**$3,077**	**$3,697**	**$450**
Org.rev - Square feet, millions(2)	**36,328**	**32,236**	**31,854**	**30,693**	**32,778**	**2,127**	**24,743**	**20,715**	**16,500**	**13,500**	**18,864**	**4,253**
Org.rev - Stores(3)	**1,846**	**1,679**	**1,607**	**1,559**	**1,673**	**109**	**1,083**	**916**	**735**	**612**	**837**	**179**
Org.rev - Employees(4)	**83,008**	**79,075**	**75,371**	**77,440**	**78,724**	**2,800**	**35,000**	**30,625**	**26,797**	**20,781**	**28,301**	**5,222**
Growth rates - Org.rev												
Retail store sales, Consolidated	(8.1%)	(9.2%)	(11.0%)	(7.1%)	(8.9%)	1.4%	3.5%	(5.4%)	(13.1%)	(11.5%)	(6.6%)	6.5%
Square feet, millions	(3.9%)	(11.3%)	(1.2%)	(3.6%)	(5.0%)	3.8%	(3.0%)	(16.3%)	(20.3%)	(18.2%)	(14.5%)	6.8%
Stores	(2.1%)	(9.0%)	(4.3%)	(3.0%)	(4.6%)	2.7%	(2.6%)	(15.4%)	(19.8%)	(16.7%)	(13.6%)	6.6%
Employees	(2.4%)	(4.7%)	(4.7%)	2.7%	(2.3%)	3.0%	(7.9%)	(12.5%)	(12.5%)	(22.4%)	(13.8%)	5.3%
Ratios, $ - Org.rev												
Square feet /Stores	19.7	19.2	19.8	19.7	19.6	0.2	22.8	22.6	22.4	22.1	22.5	0.3
Employee/Square feet	2.3	2.5	2.4	2.5	2.4	0.1	1.4	1.5	1.6	1.5	1.5	0.1
Employee/Stores	**45.0**	**47.1**	**46.9**	**49.7**	**47.2**	**1.7**	**32.3**	**33.4**	**36.5**	**34.0**	**34.0**	**1.5**
Retail store sales/Employee	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Retail store sales/Stores	**4.8**	**4.8**	**4.5**	**4.3**	**4.6**	**0.2**	**3.9**	**4.4**	**4.7**	**5.0**	**4.5**	**0.4**
Stores	1,846	1,679	1,607	1,559	1,673	109	1,083	916	735	612	837	179
Retail store sales (MM)	**$8,870**	**$8,055**	**$7,169**	**$6,658**	**$7,688**	**$846**	**$4,230**	**$4,002**	**$3,478**	**$3,077**	**$3,697**	**$450**
Ratio growth rates - Org.rev												
Square feet /Stores	(1.8%)	(2.2%)	3.1%	(0.7%)	(0.4%)	2.1%	(0.4%)	(0.9%)	(0.6%)	(1.4%)	(0.8%)	0.4%
Employee/Square feet	1.4%	6.5%	(3.5%)	6.4%	2.7%	4.1%	(4.9%)	3.8%	7.8%	(4.3%)	0.6%	5.4%
Employee/Stores	**(0.3%)**	**4.3%**	**(0.4%)**	**5.7%**	**2.3%**	**2.7%**	**(5.3%)**	**2.9%**	**7.3%**	**(5.7%)**	**(0.2%)**	**5.5%**
Retail store sales/Employee	(5.7%)	(4.4%)	(6.3%)	(9.9%)	(6.6%)	2.0%	11.4%	7.1%	(0.6%)	10.9%	7.2%	4.8%
Retail store sales/Stores	**(6.0%)**	**(0.1%)**	**(6.7%)**	**(4.1%)**	**(4.2%)**	**2.5%**	**6.1%**	**10.0%**	**6.7%**	**5.2%**	**7.0%**	**1.8%**
Stores	(2.1%)	(9.0%)	(4.3%)	(3.0%)	(4.6%)	2.7%	(2.6%)	(15.4%)	(19.8%)	(16.7%)	(13.6%)	6.6%
Retail store sales (MM)	**(8.1%)**	**(9.2%)**	**(11.0%)**	**(7.1%)**	**(8.9%)**	**1.4%**	**3.5%**	**(5.4%)**	**(13.1%)**	**(11.5%)**	**(6.6%)**	**6.5%**

(1) OfficeMax contribution $384 in 2013 and $2,526 for the remaining years
(2) OfficeMax contribution 18,900 sqare feet in 2013, contant for the remaining years
(3) OfficeMax contribution 829 stores in 2013, contant for the remaining years
(4) OfficeMax contribution 29,000 in 2013, assumed same growth rate as consolidated numbers for employee development



Overall is the segment in decline for both companies. There are however differences in the ratio growth rates. While Staples has positive growth rates for employee per square feet and employee per stores in 2016, did Office depot have increase in retail stores sales per employee and retail stores sales per store in 2016. The improvements in both ratios for Office Depot were especially driven by heavy reduction in the workforce. Staples situation is the opposite, with an increase in the workforce, resulting in an increase in employee per stores but reducing the retail stores sales per employee. What affects the retail stores sales growth rate to be more negative for Office Depot is the heavy reduction in the number of stores. Looking at the ratios in dollar amounts, Staples has lower retail stores sales per store and more employees per store and per square feet. This translates into a lower retail stores sales per stores growth rate. Staples needs to look on how to

improve retail store sales per store through, either reducing number of stores or number of employees. The growth prospects do not look good, for either companies' segments.

Revenue analysis - Same-store sales
Fundamental analysis - Revenue analysis
(%)

	Staples						Office Depot					
	2013	2014	2015	2016	Average	Std.dev	2013	2014	2015	2016	Average	Std.dev
Same-store sales growth	(4.0%)	(4.0%)	(4.0%)	(5.0%)	(4.3%)	0.4%	(4.0%)	(2.0%)	0.0%	(2.0%)	(2.0%)	1.4%

Same-store sales, includes sales in US stores open for at least one year, excluding remodeled and significantly downsized stores
Source: https://retail.emarketer.com/

Same store sales growth of just "comps" is year-to-year growth in stores that have been operating for a year or more. This is a very important measure of growth, because it reflects the individual company ability to compete effectively in its local market, and while new stores require heavy capital requirements, does the growth in comps require only incremental capital investments. This means that the growth in comps is also growth with higher capital turnover, higher ROIC and greater value creation as a result (Koller et al., 2015). The table shows that Staples are clearly struggling with same-store sales growth, while Office Depot has experience improvements in 2014 and 2015, which is probably a result of the merger with OfficeMax in 2013. Staples need to address the negative same-store sales growth to be able to improve the company's value creation.

Revenue analysis - Products
Fundamental analysis - Revenue analysis
(%)

	Staples						Office Depot					
	2013	2014	2015	2016	Average	Std.dev	2013	2014	2015	2016	Average	Std.dev
Supplies(1)	45.2%	44.8%	44.3%	45.5%	45.0%	0.5%	46.6%	43.6%	44.4%	45.2%	45.0%	1.1%
Technology(2)	42.3%	40.6%	40.5%	38.9%	40.6%	1.2%	40.6%	41.2%	40.2%	38.9%	40.2%	0.8%
Furniture and other(3)	12.5%	14.6%	15.2%	15.6%	14.5%	1.2%	12.8%	15.2%	15.4%	15.9%	14.8%	1.2%
Total	100.0%	100.0%	100.0%	100.0%			100.0%	100.0%	100.0%	100.0%		

(1)Paper, binders, writing instruments, office supplies, cleaning and breakroom items, school supplies
(2)Toners and ink, computers, tablets and accessories, printers, cables, spftware, digital cameras, electronic storage, services for technology products
(3)Desks, seating, luaggage, sales in copy and print centers, miscellaneous items

The table below shows how each **product category** contributes to the revenue and how both companies have almost exact same distribution of sales between them. Both companies have experience as decrease in technology sales distribution and an increase in furniture and other. The supplies category has been experiencing a more staple development compared to Office Depot. What can be gained from this table, is that supplies is still the main product category contributing the most in terms of sales, while furniture and others has been increasing slightly at the expense of technology.

To sum-up the growth analysis is Staples struggling to generate positive growth rates, especially the B2C segment has fallen on hard times, while the B2B segment is doing relative better. The main reason for the struggling B2C segment is reduction in stores and employees have not been able to keep up with the reduction in retail store sales, reducing the retail stores sales per stores.

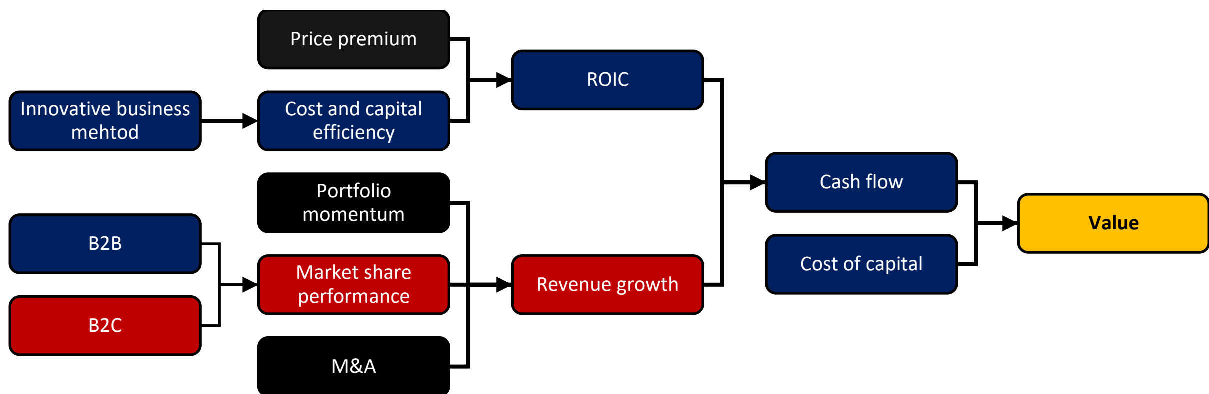
Revenue growth can be disaggregated into three main components: Portfolio momentum, market share performance, and M&A. The portfolio momentum is organic growth from overall expansion of the market segment, while market share performance is organic growth from gaining share in a particular market. Given the retail markets level of maturity and nature of operation, the portfolio momentum is a kind of revenue growth rarely seen in the market. Amazon has however been able to disrupt the retail market with leveraging its online retail business, offering a vast number of products and services. This is however just Amazon improving its market share performance and extending its business into new segments. What covers Staples revenue growth or decline, is the market share performance. With a slight revenue growth in the overall

retail industry, is Staples losing valuable market share to its competitors (Anders, 2018). This is due to an under-performance in the B2C segment, and that in an operational perspective is not controlling its expenses and adapting fast enough to the decline in revenue. This is considered a weakness, indicating Staples are not dealing with the decline in revenue in an efficient manner.

A credit analysis will not be applied to this fundamental analysis. As Staples will acquire a new capital structure after the buyout and the principal debts used are taken directly from public information disclosed by Staples. Had there been no information available regard the principal debts would a credit analysis been required to propose the debt structure of the deal.

2.4.13.Fundamental analysis conclusion

To sum up the fundamental analysis of what drives value or destroys value for Staples, the tree down below shows how an innovative business method representing a very efficient distribution network creates value through being cost and capital efficiency and thus improving ROIC. The struggling B2C segment of the operation is however reducing revenue, resulting in negative revenue growth, negatively impacting value. As mentioned before is revenue growth a catalyst for ROIC performance and balancing the ROIC and growth to create value is necessary to run a successful business. Higher ROIC companies should focus on growth and low ROIC companies should focus on improving returns and not growth (Koller et al., 2015). Staples does have higher ROIC than Office Depot but in general is it expected that retail companies to have low ROIC as it is a mature/declining industry. Staples needs to improve its ROIC and stabilize its revenue growth going forward to increase the value creation. This information will help direct the strategic analysis.



2.5.Strategic analysis

With the fundamental analysis in place, describing potential operational strengths and weakness, the next step is to evaluate the strategic position of Staples. As mentioned before would the fundamental analysis help direct the strategic analysis in terms of potential factors affecting the operation.

The strategic analysis will first, in short, describe previous strategic initiatives done by the company. This will be followed up, by an analysis of the macro-environment through a PESTEL model, followed by porter´s five forces industry analysis and will end with an assessment of the Staples´ strategic capabilities. The findings will be summarized in a SWOT model and possible strategic initiatives will be reviewed in a TOWS model.

2.5.1.The 20/20 strategy

The 20/20 plan started in 2016 and was a response to the decline in revenue over the previous years. The strategy had four priorities. 1) Accelerate growth in the mid-market contract business in North America, 2) preserve profitability in North America retail Stores, 3) take aggressive action to further reduce costs and drive efficiency across the organization and 4) narrow the geographic focus to North America (Staples, Inc., Annual Report, 2016). The main goal for these priorities was to sustain long-term sales and earnings growth. This 20/20 plan did also try to shift the company from a product focused mindset to a customer focus mindset, moving from retail culture to a delivery culture (Parry, 2016). The 20/20 plan was a strategic reposition of Staples, narrowing down the business with a refocus and rationalize the operation. This strategic initiative is very relatable to what the fundamental analysis proposed and will help direct strategic analysis further.

2.5.2.PESTEL Analysis (macroeconomic situation)

The first step for the identification and assessment of the opportunities and threats, Staples and its industry are facing, is to consider the overall macroeconomic situation. This can be done using the so-called PESTEL framework. A PESTEL analysis aims to evaluate potential changes in the non-company-specific environment that will likely affect Staples performance and profitability, but also that of the other players within that same macroeconomic environment. The macroeconomic factors of change that have the potential of affecting a firm's success can be of various nature, such as political, economic, sociocultural, environmental or legal and are therefore divided accordingly in the analysis. Due to Staples' recent refocusing on the North American market, where 95% if its total sales in 2016 were generated (82% of which in the United States and 13% in Canada), this PESTEL analysis will be limited to these two countries, with a heavy focus on the United States. The analysis will disregard the small fraction of foreign operations, due to its limited significance, especially given the rather high possibility of further divestitures of foreign operations, as part of the Staples 20/20 plan implementation (e.g. negotiations to sell the Australia/NZ business).

A major consideration in the making of the PESTEL analysis, and the strategic analysis in general, was whether to use the most recent data and information available, namely data as of August 2018, one year after the acquisition of Staples by Sycamore Partners, or if using data and information available up until the date of the deal in June 2017 is the better way to go. The advantage of only using data and information that was available prior to the transaction date in 2017 would be that it would make the findings and later assumptions more relatable to the findings and perceptions of Sycamore Partners on the deal. However, considering that the resources, information and tools available to Sycamore Partners prior to the deal are most likely to be a lot vaster and more insightful than the resources available for this analysis, a fair and reasonable comparison would not be possible to begin with. Therefore, this analysis will make use of the latest information available, allowing for a more accurate picture of the current situation surrounding Staples and its implications for potential scenarios.

Political
Since the latest presidential elections in November 2016 and the beginning of the Trump administration, the political environment in the Unites States is an unprecedented and also a rather unpredictable one. President Trump's handling of foreign policy and trade have raised substantial doubts about the economic and political stability of the country, paying its toll on investor confidence over the U.S. economy. One of the most significant threats however possibly derives from the precarious tariff war between the U.S. and China. The dispute that started with the U.S. introducing increased taxes on steel and aluminum imports and China seeking retaliation is getting more and more intense and could potentially escalate into imposed tariffs on all goods imported by either country. The corresponding threats to the latter scenario have already been made (USA: Country Profile, Euromonitor International, August 17, 2018). This trade war between the two biggest economies would likely result in increasing prices, higher costs for firms dependent on the affected goods, increasing unemployment as well as decreasing investor confidence and business investments. All in all, a further escalation of the tariff dispute with China would have severe consequences for companies, consumers, investors and the overall economy ("Likely Impact of US-China Trade War: Prices Up, Growth Down", 2018).

Another major factor for Staples and the rest of the U.S. economy is President Trump's tax bill, introduced in late 2017, effective in January 2018. The tax reform brings large tax cuts for corporations as well as upper income individuals, destined to boost economy growth. The corporate tax rate reduction from 35% to 21% will increase growth in the short-term for sure, however given the rising U.S. budget deficit the sustainability of the reform is still uncertain and consequently the growth boost might decay faster than anticipated. Nevertheless, as long as the reduced corporate tax rate is effective, Staples and other U.S. companies that are affected by it will profit from the lower income taxes payable. Also, the individual tax cuts are likely to stimulate consumption through more disposable income to its recipients and give opportunity for increasing demand also for Staples (USA: Country Profile, Euromonitor International, August 17, 2018).

A further consideration for Staples and the overall economy is the minimum wage. While federal minimum wage remains at $7.50 an hour, 29 states in the U.S. introduced higher minimum wages as of 2018. The raises in minimum wages range from $0.04 in Alaska to an additional $1.00 in Maine. One the one hand, while Massachusetts, the state where Staples is headquartered, is not one of the states that are increasing minimum wages, Staples does however operate physical stores and distribution centers in some of the affected states and could experience higher labor expenses as a consequence. On the other hand, in overall, the wage raises are expected to affect 4.5 million employees (Jamieson, 2018) in the U.S., which will stimulate consumer spending and potential demand for Staples. The new wage floors therefore pose an opportunity as well as a threat to Staples, where positive and negative effects counteract and to some extent balance each other out.

Economic
Staples' performance is highly dependent on consumer and business spending habits; an increasing consumer and business spending to be exact. A stagnant or declining spending habit could negatively impact Staples' business and financial performance (Staples, Inc., Annual Report, 2016). Consumer and business spending again are significantly dependent on the overall economic conditions in the countries where the company operates. Therefore, this section aims on identifying the economic health and outlook of the two North American economies and their relevance for Staples' future profitability.
According to Staples, factors with potential influence on consumer and business spending include unemployment rates, energy and commodity costs, healthcare costs, interest rates, taxes, consumer credit availability, fluctuating financial markets, small business formation and consumer confidence (Staples, Inc., Annual Report, 2016).

Low unemployment is an important driver for consumer spending and consequently economy growth and for Staples the rate of so-called white-collar unemployment is of particular relevance (Staples, Inc., Annual

Report, 2016). While the overall unemployment in both the U.S. and Canada is expected to decrease over the course of the next two years, especially the U.S. is in for some of the historically lowest unemployment rates in a long time. U.S. unemployment of 4.4% in 2017 is forecasted to decrease to 3.5% by 2019 (World Economic Outlook Report, IMF, April 2018). However, most added positions are low-wage retail and food service industry jobs and not so much office jobs (USA: Country Profile, Euromonitor International, August 2018), therefore the positive effect of historically low unemployment may not be too relevant for Staples' demand and revenue projections. The table below contains the recent and projected unemployment rates for both Canada and the United States. It can be seen that unemployment in Canada is higher than that in the U.S. and while it is projected to decrease as well, not nearly as rapid as in the United States.

Unemployment	2017	2018	2019
United States	4.4%	3.9%	3.5%
Canada	6.3%	6.2%	6.2%

Recent unemployment rate and projections for the U.S. and Canada (Table was created based on information retrieved from IMF World Economic Outlook Report, April 2018)

As for interest rates, the Federal Reserve of the United States has been raising rates towards normalization since 2015, as part of the country's robust economy development. Currently at 2% the rate is expected to experience two more hikes within 2018, three more in 2019, peaks at 3.4% in 2020 and neutralizes to 2.9% in the long-term (Fleming and Wigglesworth, 2018). While Canada's interest rate is not yet on the exact same level as the one of the U.S., it has been increasing at an equal pace over the last 12 months, resulting in the current rate of 1.5% (Alini, 2018). The Bank of Canada didn't announce any further increases yet, but they are likely to follow as the economy grows and unemployment is in decline. While the rapid normalization of the interest rate in the U.S. mirrors the forecast of a growth boost and increasing employment (Fleming and Wigglesworth, 2018), tighter monetary policies will also curb disposable income of consumers and consumer spending. As a result, Staples could face decreasing sales.

Businesses operating outside their home market are subject to a number of risks inherent in foreign operations, one being the exposure to foreign exchange risk. Staples' sales generated outside the U.S. are denominated in the currency of the respective country, meaning that a translation into the home currency USD may lead to additional losses or gains, depending on whether the exchange rates are unfavorable or favorable for the company. The same principle applies for supplies purchased in another currency. As far as sales are concerned, through Staples' refocusing on the North American market by divesting European operations, Staples clearly reduced its exposure to foreign exchange risk. Nonetheless, a certain share of revenue remains to be generated abroad, mainly Canada, and therefore the exchange rate between the USD and the CAD is the most relevant one for Staples. Back in 2017, before the tax reform the USD was in a month-long plunge while the CAD appreciated due to its robust economy and the Bank of Canada's first interest rate hike in years (Alini, 2017). Now, with the low corporate tax rates, accelerating growth and further predicted interest rate hikes in the U.S., while the growth in Canada is slowing down, the USD is appreciating again compared to the CAD and is expected to continue to do so (USA: Country Profile, Euromonitor International, August 2018). While an appreciating USD and a depreciating CAD is a rather unfavorable condition for Staples and its sales generated in Canada, however it is not likely that this development will have a significant effect on Staples' income. Firstly, because the appreciation of the USD is a quite moderate and decaying one and secondly because Staples is counteracting risks related to foreign exchange rate fluctuations through foreign exchange hedges and the application of other risk management strategies (Staples, Inc., Annual Report, 2016).

In 2017 the U.S. stock market has been historically calm and productive (Arancibia, 2018), with stock market prices (as of the SP500) rising and unusually low stock price volatility, as measured by the VIX index (US

Economic Outlook: Q3 2017, Euromonitor International, August 2017). The first months of 2018 were quite tumultuous and resulted in doubling stock market volatility. While the market has calmed for now it remains a sensitive risk factor considering the rapidly hiking interest rates, increasing populism in several advanced economies, including the U.S., as well as uncertainties over potential trade wars with major trading partners (U.S. Economic Outlook: Q2 2018, Euromonitor International, May 2018). Due to Staples being a private company now, the market fluctuations itself don't have a significant direct effect on Staples. The reasons and consequences resulting in and from the market fluctuations, like consumer spending and credit availability, do however affect Staples but are already addressed separately at other points in this analysis.

Consumer confidence, another very relevant factor, as well as Small Business Optimism have experienced steep increases towards the end of 2016 and the election of the Trump administration. Growth is not nearly as rapid as in 2016 anymore and is likely to slow down further, nonetheless consumer and business confidence are still well above the long-term average (U.S. Economic Outlook: Q2 2018, Euromonitor International, May 2018). Consumer and business confidence could take a significant hit if trade disputes were to escalate further, though. Consumer and business confidence drive consumption and demand for Staples' products and service and are therefore both an opportunity and a threat for sales, depending on which direction it takes.

The U.S. is the world's biggest consumer market economy is driven by consumption. And so is Staples' demand. In 2018 consumption has increased 2.5% and is expected to increase by 2%-2.6% in 2019. The growth in consumer spending derives from the still favorable credit conditions, increasing disposable income and high consumer confidence (U.S. Economic Outlook: Q3 2018, Euromonitor International, August 2018). Again, the sustainability of this consumer spending growth is highly dependent the country's trade situation development.

Taking all above factors into consideration, the economic outlook in Staples' major operating economies, the U.S. and Canada, is not too bad, especially in the United States. The U.S. economy is expected to grow above average compared to other advanced economies, including countries like Germany, France, Italy, Japan and the UK. The exact values can be found in the below table.

Real GDP	2016	2017	2018	2019
United States	1.5%	2.3%	2.9%	2.7%
Canada	1.4%	3.0%	2.1%	2.0%
Advanced Economies	1.7%	2.4%	2.4%	2.2%
World Output	3.2%	3.7%	3.9%	3.9%

Recent Real GDP growth rates and projections for the U.S. and Canada, as well as all advanced economies and the entire world economy (Table created based on information retrieved from IMF World Economic Outlook Update, July 2018)

At the current state of low unemployment, a booming economy, high consumer and business confidence, fueled by major tax cuts, Staples faces various opportunities for revenue growth and increased profitability, at least in the short-run. In the long-run the situation is susceptible to significant changes when the effects of the fiscal stimulus decay, interest rates are back to normal and most importantly trade disputes worsen. All these events pose substantial threats to consumer and business spending and therefore Staples future performance.

Sociocultural

Changes in sociocultural factors relevant to a company's performance are often related to demography and shifting values within society (Warner, 2010). Changes in demographic structure is quite an important factor for estimating future consumption levels and behavior.

The U.S., like most Western countries is facing big challenges deriving from the demographic shift towards an increasingly older population. With the high-birthrate generation of the baby boomers reaching retirement age and the low-birthrate generations X and the Millennials take over the workforce, the

economies and societies are in for a big change. Labor markets are already getting tighter now that the first baby boomers retire, and the effect is about to become more intense in the coming years. As labor markets tighten, competition over qualified personnel, especially in areas of specialized expertise will become increasingly intense and costly. Since Staples performance is dependent on attracting, engaging and retaining qualified personnel in various areas of its business, they will face some challenges and potential expenses in this regard (Staples, Inc., Annual Report, 2016).

Retiring baby boomers will not only have an effect on Staples' ability to meet their labor needs, but also on consumer spending and Staples' demand. The people within the workforce age (Age 25 – 64) have the highest income and are consequently also the highest spenders (U.S. Bureau of Labor Statistics, December 2015). Once retired, disposable income and inevitably consumer spending drop significantly (McBride, 2017). With consumption being a major driver of the U.S. economy and Staples' sales, an increasing number of older and retired people with decreasing income at their disposal will negatively impact Staples' revenues.

A growing trend towards online trading has also made its entrance on the retail industry. With the Northern American online retail sector showing double-digit growth rates in recent years and market value forecast estimating an increase of 53,7% increase in the sector´s total value from 2017 to 2022. Especially the everyday consumers increased rate of engagement with the internet through smart phones and tables have shifted consumer behavior towards online sales channels (Industry Profile: North America – Online Retail, MarketLine, 2018). Staples has already responded to this with heavy investment into establishing an online sales channel and is today the second largest online retailer in the world ("Trends in the office supplies industry", 2016). This pose both as a threat and an opportunity, as Staples needs to keep adapting to new online retail trends to maintain its position, but this new sales channel will also give rise to many interactions with consumers and extend the options of differentiate the consumer experience.

Technological

The previously mentioned demographic shift and the retiring of the baby boomers does also bear challenges on a technological level. Probably the most significant one. As the workforce and therefore Staples' customer base is replaced by a generation that is driven by digitalization and technology, Staples will likely experience major changes to their demand. In order to meet the demand of the shifting customer base they will have to make some fundamental adaptions to their assortment, since their core business of office products is probably becoming more and more irrelevant with that generation. Especially, the increase in digitalization of the work environment will impact the demand for traditional office supplies in the coming future. Smaller and smarter devices, such as smartphones and tables, will eventually reduce demand for paper, and cloud services, such as Dropbox, will reduce the need for faxes and prints ("Trends in the office supplies industry", 2016). Brick-and-mortar-retailing is on a decline and also Staples has closed down several physical stores over the past years, giving increasing importance to online channels like websites, mobile platforms and social apps. The pace of change within technology is high and offers quite a lot of both, opportunities and threats. In a highly competitive industry like that of Staples, the ability to keep up with digitalization, meet the customers demand and use the right technologies in order to enhance the customers shopping experience are crucial to the company's future and success. *"New technologies have put customers in the driver's seat — they have the power" (Global Retail trends 2018, KPMG, 2018).*

Environmental

Some of the factors listed so far are more significant than others because they reflect long-term developments and shifts in values among society. One of them was the digitalization. Another one is the increasing awareness of the environment and the support of environmental protection, the fighting of global warming and climate change (Warner, 2010). People are being more conscious of their environmental footprint and also tend to increasingly participate in political-economic decision making (Warner, 2010). As a result, governments and legislators may be pressured into further restrictions and regulations on clean and

efficient business practices for the sake of the environment. A potential increase in rules and regulations aiming for more sustainability and responsibility could result in additional costs for an affected company. On the other hand, sustainable business practices such as eco-friendly products, green and energy-efficient production, recycling and waste reduction give opportunities for brand differentiation, competitive advantage and revenue growth. The trend of environmental protection is likely to increase even further in the future where the done damages become more obvious and the need for more radical changes becomes more urgent.

Legal

Due to Staples' increasing expansion beyond its core business of office supplies into new markets and channels, the size and complexity of the regulatory framework it has to comply with increases as well (Staples, Inc., Annual Report, 2016). Staples has to comply with a large set of laws, rules and regulations, including but not limited to state and local wage hour laws, securities laws, import and export laws, privacy and information security regulations, product safety, warranty or recall regulations. Any change in those resulting in tighter regulations and increased enforcement could increase costs and have adverse effects on Staples' profitability. Especially in relation to employment, companies experience increasing challenges through private litigants and class action lawsuits (e.g. wage and hour law), which might continue to increase in the future (Staples, Inc., Annual Report, 2016).

The table below sums up the PESTEL and scale the level of threat and opportunity from 1 to 5 with 5 meaning an either large opportunity or threat.

PESTEL overview						
	Political	**Economic**	**Sociocultural**	**Technological**	**Environmental**	**Legal**
Opportunities	Tax bill (3) Minimum wage (3)	Business confidence (4) Consumer confidence (4) Unemployment (3) Exchange rate (2)	Online consumers (4)	Digitalization (5)		
Threats	Trade war (3) Minimum wage (2)	Interest rate (3) Market fluctuations (3) Exchange rate (2)	Demographic change (3) Online consumers (4)	Digitalization (5)	Environmental rules (1)	Complex framework (2) Employee lawsuits (2)

2.5.3. Key drivers of change

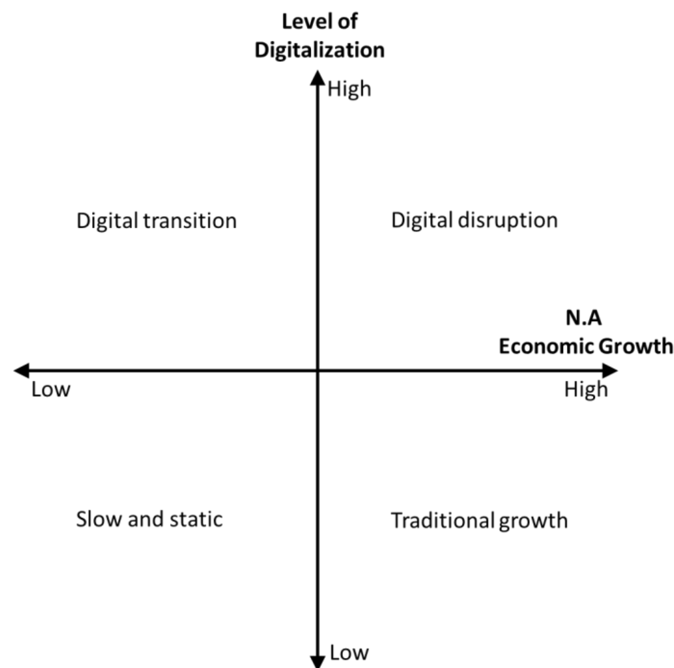
Having established several drivers that can potential change Staples´ future prospects, the next step is to determine which of these drivers are key drivers of change. A key driver of change is an environmental factor likely to have a significant impact on the future of a company or organization. Given Staples is in the retail business which primarily concerned itself with consumer behavior and economic changes, the main focus will be on drivers in these categorizes (Johnson et al., 2013).

The first key driver of change will be named economic growth in North America. This key driver comprises all the economic drivers described in the PESTEL as each of these drivers describes a significant part of the overall economic trend and will move together in the same direction given the overall economic performance. An increase in the overall economic growth in North America, will increase revenue growth but also heighten the competition, while a decline would result in low or no growth and divert more focus on cost control and managing the low growth in a profitable manner.

The second and last key driver of change, will be named digitalization, which includes the drivers regarding online consumers and digitalization. This key driver of change will describe the overall level of digitalization in North America, both in terms of consumer behavior and digitalization of the workforce. A high level of digitalization would result in more disruption in Staples´ industry and a much higher demand of its actor, to be able to respond in both, a timely and appropriate manner. It will also reduce the demand for traditional office supplies and increase the demand for new services posing both many threats and opportunities. A lower level of digitalization would result in a more stable demand environment, but also put more pressure

on maintaining existing customers, as the price would possibly be the main differentiator. The remaining drivers depicted in PESTEL will affect Staples, but only to certain extend, and will not affect Staples´ future revenue growth in similar manners as the key drivers of change.

These two key drivers of change can help create different scenarios. These scenarios will help understand the different future environments Staples might encounter but will not be the direct basis for the scenarios used in the DCF and LBO. Depicting the key value drivers on different axis can help visualize how different scenarios might come about.



The four scenarios depicted, represents very plausible outcomes. The digital disruption would be a scenario with high revenue growth but also high levels of investments into new solutions to accommodate the new kinds of demand. This would also include further downsizing of physical stores, but at the same time put more pressure on online delivery systems. Moreover, would the product categories shift towards more electronics at the expense of traditional office supplies. The digital transition is a scenario with low growth but still a focus on shifting towards less physical stores and move towards more online sales and digital products. Price will play a relative bigger part as the competition of existing customers will be heightened. The traditional growth represents increase in revenue growth and a more stable demand environment with less shift towards digital platforms and products. The slow and static scenario means, slow growth and a stable demand environment, but with very high competition to keep the existing customer base and high pressure on reducing cost.

The value of establishing scenarios is providing plausible alternative business environments. The goal is not to make a precise prediction but to offer a range of future possibilities (Johnson et al., 2013). With establishing key drivers of change for Staples is the next step is to get an overview of the attractiveness of Staples´ industry and relate to the key drivers.

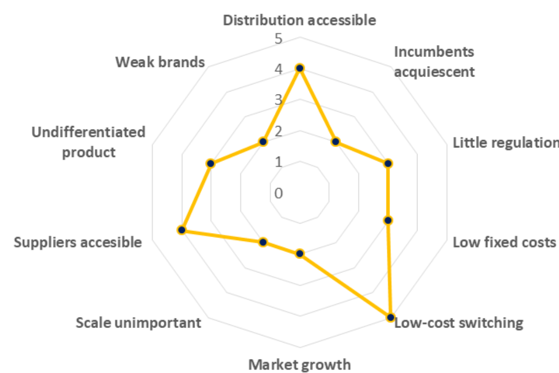
2.5.4.Porter's five forces

Micheal Porter´s five forces is a framework that helps to describe the dynamic, structure and overall attractiveness of an industry. To gain a better understanding of Staples previous and potential future position, an industry analysis will help provide further information to assess potential threats and opportunities. It has previous been established that Staples belongs to the sub-industry, office supplies. This sub-industry will be the main focus of this analysis, but more general dynamics of the industry group retail stores will also be included.

Following the framework of the Porter´s five forces, is the attractiveness of the industry based on: 1) Threat of entry, 2) Threat of substitutes, 3) power of buyers, 4) power of suppliers and 5) extent of rivalry between the competitors

The threat of entry describes how easily it is to enter the industry, and while a greater entry barrier improves the attractiveness of the industry, does a low entry barrier means higher chances of new threats (Johnson et al., 2013). As office supplies sub-industry is a sub-category to the industry group retail stores, the office supplies companies will encounter almost the same dynamics as the rest of the industry group. Entrance into office supplies would be very hard to new companies given the level of capital required to establish a physical presence on a national level and an efficient distribution network. New threats are more likely to come through acquisitions within the industry or established companies diversifying into the business (Industry Profile: Global Specialty Retail, MarketLine, 2011). Amazon has with its new membership program for businesses in U.S. moved into the office supplies segment by extending the company´s reach (Perez, 2017). Walmart is also entering into the office supplies sub-industry with their launch of delivering office supplies to business through their subsidiary Sam´s Club (Sozzi, 2016). Threats of entry is thus coming from well-established retail companies extending their business into sub-industry groups. This will pose as a significant threat to Staples in the coming future and especially in the B2B segment. This is further supported by the low switching cost for buyers, relative low level of product differentiation and the importance of scale in the retail industry.

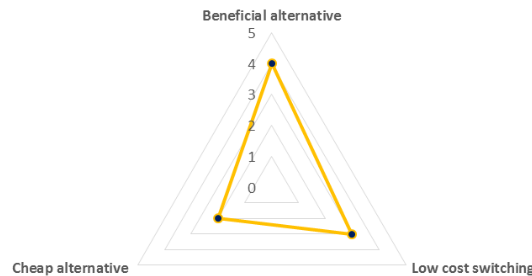
Below is an overview of threat of entry with 5 meaning a strong threat and 0 a very weak threat. The overall assessment of threat of entry is a moderate threat, especially from big well-established retail companies.



The threat of substitutes is the threat of offers offering similar benefits to the industry´s products and services (Johnson et al., 2013). There is a no real substitutes to the retailing industry group, but for the office supplies sub-category there might be a substitution threat from a general approach towards digitalization of both workforce and educational work. The main goal for office supplies is to help and support people in their work or educational activity. The sub-industry has expanded this goal to also provide additional products, such as prints, and break room facilities and additional services related to delivery. The switching cost would however not be significantly high in relation to these additional offerings but switching to a more digital support system for a workforce would require a significant investment in new equipment. This leads to the fact, that there is no real cheap alternative to office supplies as the alternative would be tablets, computers

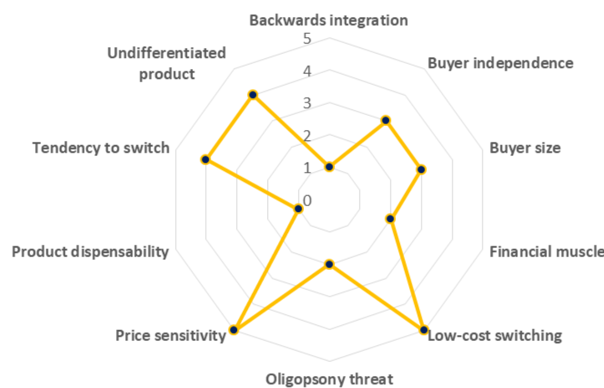
and expensive hardware. The benefit of the alternatives is however a threat as digitalization does have a lot of potential benefit of both reducing cost and improving work efficiency.

The overall assessment of threat of substitutes is moderate and will highly depend on the speed of progression towards digitalization.



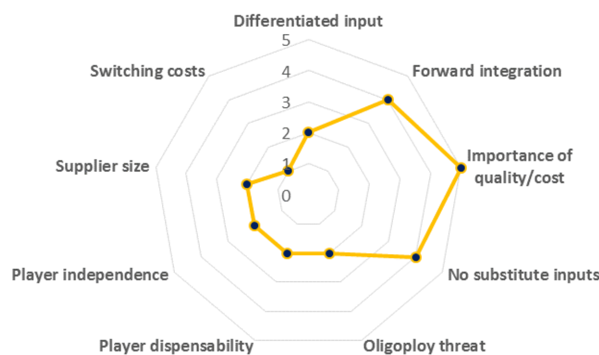
The power of buyers describes how attractive the industry is in terms of buyer's relative strength (Johnson et al., 2013). Given that Staples is a retail company, the distinction between ultimate consumers and strategic customers is not necessary, as retailers deliver products to end-consumers. As retailers offer products to end-customers are there no threats of backwards integration. The product differentiation is also low posing little threat. Potential differences would however be related to different services offerings and discounts. The buyer size is low for B2C and varies for the B2B segment. The main threat is however the low switching cost for buyers, as office supplies and paper are generally cheap commodities (Gulati et al., 2014). Maintaining exclusive contracts through lock-in strategies can however play a significant part especially for B2B (Gulati et al., 2014). Amazon with their new membership program is a good indication of where the industry is leading towards. As there is little to no difference between office supplies, the price sensitivity is high, but the product dispensability is still considered low. Staples has a potential opportunity to reduce buyer´s power by reducing switching cost and increase product differentiation with their membership programs for businesses, such as Staples Plus and Staples premium. This could help gain Staples and edge and compete on other factors than prices. The 20/20 plan also mentioned how Staples was undergoing a change from a product orientated to a customer orientated business and repositioning itself from a retail business to a delivery business. This change would further sustain and potential develop Staples into better competitive position in the future.

The overall assessment is that the power of buyers is high, especially with emphasis on the low cost of switching and the price sensitivity.



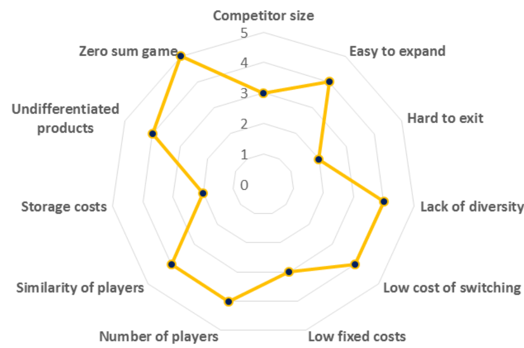
The power of suppliers describes how much influence suppliers have on the industry (Johnson et al., 2013). This kind of industry with a wide variety of different products also has numerous suppliers. The individual product groups will however have different level of supply power. For instance, is electronics usually delivered by large multinational corporations like Samsung, which has considerable bargaining power, while general office supplies has many different suppliers, reducing the bargaining power. The switching cost of a supplier is considered low given the numbers of different suppliers available but there is also risk attach to shifting between suppliers which includes new supply chains and responding to sudden demand changes. With the increase of online retailing, is forward integration becoming an increasing threat as manufactures can skip intermediate steps, such as retailers, and sell direct to their end-customers. Sometimes do retailers use third party vendors which opens up for opportunities to skip past the vendors and get supplies directly from the manufacture. This could help improving quality control and reduce risk of sudden disruptions to the supply chain, but it would also require new investment into supply chain and distribution network. The quality and cost of the products is also very important to office supplies retailers as the customers have high bargain power and intense competition press market prices down, this increases the power of suppliers that can deliver quality to lower prices. Further, is the only real substitute for office supplies electronics, which has suppliers with considerably more bargain power.

The overall the power of the suppliers, is considered moderate. Even though the suppliers have bargain power in terms of quality and cost and lack of substitutes, do both low concentration of suppliers and low switching cost reduce this bargain power significantly.

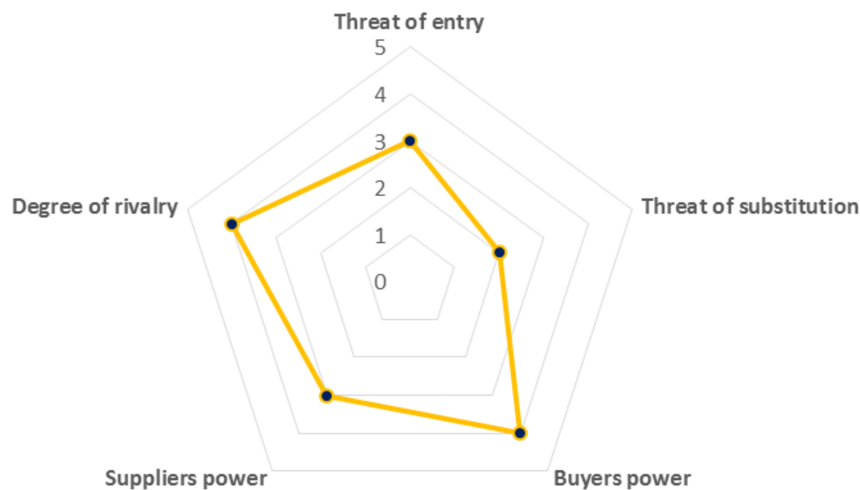


The degree of rivalry describes the level of competition in the industry (Johnson et al., 2013). The retailing industry is heavily fragmented with a large number of players, such Amazon and Walmart. The sub-industry of office supplies is however less fragmented with Staples and Office depot the only two biggest retailers in North America only focusing on office supplies. The sub-industry does however also include other retailers competing in the segment through either subsidiaries or an extended product line. The new entries of Walmart and Amazon will further increase the level of competition, especially given their individual size. What furthers the degree of rivalry is low switching cost, lack of diversity, similarities between players, undifferentiated products and the lack of opportunities to expand. The rivalry is further intensified by, in most cases, the competitions is of a zero-sum game, where one player’s loss is the others direct gain.

The degree of rivalry can be described as high especially with the prospect of Amazon and Walmart entrance on the market.



Overall attractiveness of the industry



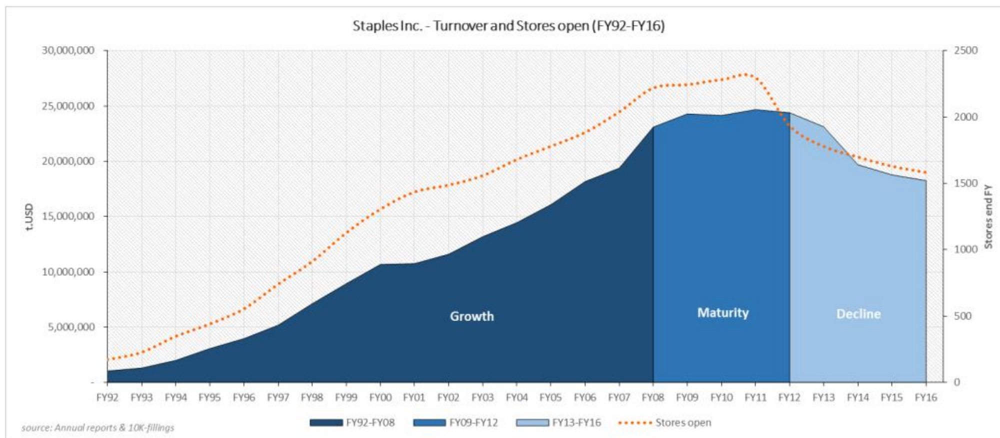
The overall attractiveness of the industry is considered low, because of a very high level of competition and powerful buyers. These circumstances make it very difficult to compete effectively and will force Staples, to not only address the strength of the buyers, but also the entrance of new bigger players. In terms of potential opportunities and threats, is the entrance of both Amazon and Walmart into the industry a significant threat, while opportunities to skip third-party vendors might be of value but unlikely given the required investment.

Type of industry and industry life cycle

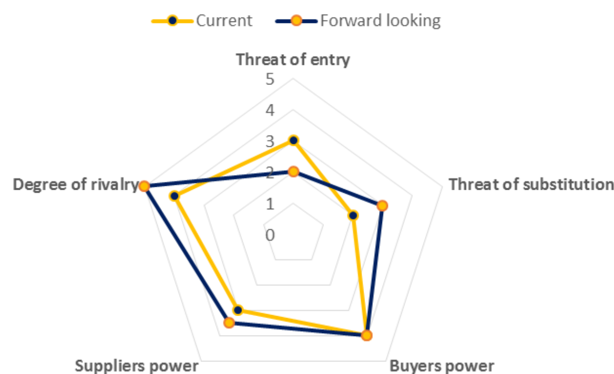
The five forces described above can help identifying the type of industry Staples are competing in. This will help to better understand the broad patterns of competitive behavior in the industry moving forward. The type of industry most similar to, what the five forces have depicted is a **perfect competitive industry**. Even though there are moderate barriers of entry, do the high level of competition, undifferentiated products and high focus on prices, all share similarities to a perfect competitive industry. The industry does however have oligopolistic behaviors in terms of current numbers of players, but does not has the necessary power over buyers to execute such an opportunity.

These five forces also need to be set into an industry life cycle perspective, as the different stages of an industry influences the five forces. The revenue development for Staples, since its IPO in 1992, has experience 3 different stages, a growth face from 1992 - 2008, maturity stage from 2018 until 2008 – 2012 and a decline stage from 2012 until today. This **decline stage** is usually a period with extreme rivalry, high exit barriers,

falling revenue, and zero-sum games (Johnson et al., 2013). The key to survive in such an environment is to control cost and scale up the business.



Being a perfect competitive industry in its decline stage increases the chance of a further increase in rivalry and buyer power. The digitalizing trend will also increase the level of substitution threat and direct office supplies companies towards suppliers with more power. The increase in rivalry, increase in buyer and supplier will however lower the threat of entry. Looking forward will the industry converging towards a **less attractive** industry**.**



This can be related to the four scenarios established previously. Threat of entry would probably not be reduced in a significant amount with high level of digitalization, as a shift towards more online sales reduces the entry barrier and makes it easier to make an entrance. Further, would increase digitalization increase the threat of substitution as demand would decrease for traditional office supplies. Buyer's power would however be lower with more digitalization as price sensitivity would be lower and differentiated product would increase. As mentioned is the power for suppliers with electronic goods traditionally high and more digitalization will therefore increase suppliers' power as they are more concentrated. The degree of rivalry would increase more, with lower entry barriers especially Amazon would excel in a more digital environment, as they have already proven before.

With the macro-environment and industry-specific environment detailed, opportunities and threats can be listed on the basis of the findings in both sections.

2.5.5.Opportunities

Increase in business and consumer consumption

As Staples mentions in their annual report is various economic factors, which include consumer and business confidence, unemployment rate and economic growth prospects. With increasing consumer and business confidence hitting numbers above the long-term averages, low unemployment rates forecasted to decrease to 3.5% in 2019, and a US economy expected to grow above average reaching 2.9% and 2.7% in 2018 and 2019 respectively. These factors together with favorable credit conditions, increase in disposable income are expected to increase general consumer spending by 2.0-2.6% in both 2018 and 2019. This has great potential for increasing revenue for Staples.

Growing private label products market in the US

As mentioned before is there an increasing tendency of retailers acquiring private labeled products. Staples is not exception offering high quality products to lower than average market prices. There is a growing demand for private label goods in the US market. In 2015 did the total annual sales of private label products surpassed $110 billion and has since increased with more than $2 billion. Further is unit shares increased by 21% and dollar shares increased by 18% during the same period (Company Profile: Staples, Inc., MarketLine, 2018). In 2016 did Staples own brand offering, which includes Quill and other proprietary products, represent approximately 29% of total sales, and comprises of more than 10,000 own products and services (Staples, Inc., Annual report, 2016). A general increase in private label products will improve Staples´ revenue and margins.

Growth in e-commerce sales

With the growing tendency of e-commerce and online retail sales, represented by a 16.4% increase in e-commerce sales in the US from the first quarter in 2017 to the first quarter in 2018, and totaled $123 billion in dollar amount (Company Profile: Staples, Inc., MarketLine, 2018). As Staples has a strong presence in online sale channels and has potential of leveraging its distribution network to accommodate the growing increase in e-commerce sales, this will improve revenue through an increasing customer base.

Membership programs

The membership programs, Staples plus and Staples Premium, provide an opportunity to lower the switching cost of its buyers and increase revenue through encouraging the customers to buy more. The consumer loyalty management market was valued at $1.93 billion in 2016 and expects to grow with an annual compounded growth rate of 21% reaching a value of $6.95 billion in 2023 (Stephens, 2018).

2.5.6.Threats

Increasing competition in the office products market

As Staples has a diverse and wide product portfolio is the competitors also numerous. This includes online retailers such as Amazon, mass merchants as Wal-Mart and Target, warehouse clubs as Costco, electronics retail stores as BestBuy, specialty technology stores as Apple, cope and print businesses as FedEx Office and office supplies as Office Depot. Further, has the entrance of both Amazon and Wal-Mart into the B2B segment of office supplies increased the competition in a segment very distinct to Staples. This intense competition in the industry will potentially reduce revenue and financial performance.

Increase in labor cost and interest rate

The federal minimum wage rate in the US has risen from $5.15 per hour in 1998 to $7.5 per hour in 2018. Further do 29 states in the US record higher minimum wage rates than the federal minimum. Having a total workforce counting 77,440 employees in 2016 is Staples highly dependent on wage regulations and a further increase in wages will reduce profitability. The interest rate is also expected to increase peaking at 3.4% in 2020. This has potential of reducing both consumer spending and confidence and increase the debt burden

from the increase in debt from the leverage buyout. This could result in lower revenue prospects and lower profitability.

Digitalization of workforce and consumer habits.
With the demographic shift in the western world will the level of digitalization increase which also includes the digitalization of the workforce. Office supplies, paper and print will see a reduction in demand, while consumer electronics will have an increase. This will force suppliers of traditional office supplies to adjust and will threaten the level of revenue generated. A shift towards more electronics will also increase supplier power as the electronic suppliers is less fragmented with higher bargain power. The increase in technologies and digitalization of consumer habits will but pressure on brick-and-mortar retailing and heighten the competition further as consumers has a wider range of options to choose among. This will increase buyer power and reduce revenue through lower prices.

2.5.7.Strategic capabilities

Both the PESTEL and Porter´s five forces both describe Staples external environment and how possible threats and opportunities might influence the future of Staples. The next step is to look into the internal capabilities of the company and determine what competitive advantage and disadvantage the company possess. A strategic capability is a capability that contribute to long-term survival or competitive advantage.

As mentioned in the fundamental analysis do ROIC improvements come from either price premiums or cost and capital efficiencies. Cost and capital efficiencies have already been discussed in the fundament analysis, so it would be fitting to discuss potential strengths and weakness in relation to price premiums. Recalling that price premiums comprises of innovative products, quality, brand, customer lock-in and rational price disciplines. Innovative products, where the company can charge premiums through both superior values offers and protection from patents, is not considered relevant for an office retailer such as Staples, as the company don't produce new products. Neither is quality considered highly relevant, as much of Staples´ product categories have an undifferentiated nature. Quality is not being totally disregarded, but the level of quality for office supplies is not comparable to other industries, such as the car industry where quality is a defining factor (Koller et al., 2015). Brands is in most cases highly correlated with quality, with the main difference being that brands offer price premiums with the brand itself. Staples is a brand in itself and offer more than 10,000 own brand products and services with especial emphasis on being environmentally friendly. This kind of branding does however not result in price premiums but is a way of depicting quality to lower than average prices to its customers. *"Staples own brand products deliver genuine value to our customers with prices that are at least 10% lower than the national brand yet are of a comparable quality."* (Staples, Annual report, 2016). Customer lock-in is about increasing the switching cost for the products and services offered. In the industry analysis it was argued that customers have very low switching cost because of the products being undifferentiated and the number of market participants. Staples has however tried to change this with introduction Staples plus and Staples premiums for various sized companies. There is a clear benefit of commencing into such programs, as described in the Staples section, but these benefits are not considered to be of a high level of customer lock-in. Only Staples premium, which offers an account manager, would be considered a light customer lock-in, as valuable knowledge could be acquired, of the customers' demands and needs and help develop a more complete customer service. Rational price discipline is situations where a particular market charge price premiums as the markets participants rationale a high price floor instead of engaging into a price war (Koller et al., 2015). This is often seen in cases where a single leader with the required scale and strength is able to charge higher prices while others follow. Given the office supplies industry is high fragmented with several big players is this not an option for neither Staples of other market participants

Having discussed price premiums is the next step to establish strategic capabilities and potential competitive advantages, which are all based on both the fundamental analysis, the section about Staples and the previous discussion.

"Parenting effect" from Sycamore

Sycamore partners has previous shown than they are very cable of turning struggling retail business into profitable investment, through either optimization of corporate scope, cost cutting, improving margins, reducing capital requirements, removal of inefficiency management and corporate refocusing. Even though Sycamore is not known for getting involved in the day-to-day operation, can Sycamore offer extensive knowledge and experience through either replacing management, board positions or take big decisions regarding the corporate scope. This is considered, a strength for Staples as this add external capabilities to the company which has great potential to generate value.

Efficient distribution network

As mentioned in the fundamental analysis does Staples have a distribution network which allow the company the control its cost related to COGS more efficiently compared to both its closest peer and industry. The delivery fulfillment centers and large distribution centers help reduce both labor and inventory cost with centralizing and scaling. Further does this distribution network increase the level of supplies circulating, which makes way for bigger quantities sales, further reducing cost (Company Profile: Staples, Inc., MarketLine, 2018). Another strength attach to the distribution network is the backup inventory at the distribution centers, making quick responds possible to unanticipated situations and make the supply chain more reliable.

Staples premium

As mentioned in both the section regarding Staples and price premiums is Staples premium membership offer to larger businesses. This membership offers a fully customized pricing programs and will help attach and retain larger customers. The dedicated account manager will further help getting a closer relationship with the customers and gain valuable knowledge for future service offerings. This will help increase the switching cost both through its discounts offerings and the knowledge lost regarding service and needs. This whole membership practice does also propose a possible future opportunity, in that regard of making Staples more able to both retaining its existing customers and attract new customers with a differentiated offer.

Wide product portfolio and product related services:

In the section describing Staples, the many different products and related services were laid out. The products were office supplies, electronics, furniture, cleaning, break room, mail/ship and copy/print, and the services were print services, marketing services, shipping services, tech services and office services. Not only does this amount of product and services ensure most customer needs are met, the related services further help provide a more integrated offering. Further does the company´s merchandise team constant review and update the categorizes, which has resulted in increased offerings for both desktop and mobile products (Company Profile: Staples, Inc., MarketLine, 2018). This wide number of products and services helps Staples serve a wide variety of customers and at the same time helps the company in customizing valuable offerings to its customers. Especially, does the B2B segment value theses customized offerings and related services.

Multiple sales channels

Staples make use of multiple channels to sell its wide product portfolio. These channels include contracts, retail stores, catalogs and online websites. Having a wide variety of sales channels make it both easier to accommodate customers' needs and demands and opens up to a much bigger customer group. The contract channel is especially relevant for the B2B segment, as it targets mid-size businesses and larger regional Fortune 1000 companies. This channel also includes special services like account management, free delivery,

customized pricing and payment terms, usage reporting and stocking of certain proprietary items. The retail stores target the small business, home offices and consumers. The websites (Staples.com and Staples.ca) targets small officers and home offices, as well and offer services as next business day delivery. Quill.com targets small and mid-sized businesses in the US through internet and catalogs. Overall do all these channels deliver convenient stores locations, easy and accessible websites, fast order delivery and efficient customer services (Company Profile: Staples, Inc., MarketLine, 2018). This is considered a strength because leveraging all these channels together with the wide product portfolio and efficient distribution network helps Staples attract a large customer base and maintain its strong position in the office supplies retail industry.

2.5.8.VRIO

Having established three competitive advantage, the next step is to evaluate them to further asses of these capabilities can be sustained and will create value in the future. A way of evaluating theses strategic capabilities is to relate them to four key criteria: Value, rarity, inimitability and organizational support (Johnson et al., 2013).

Value:
All the three strategic capabilities translate into value through either generating higher revenue or reducing cost. While both the product portfolio and multiple channels helps generate higher revenues, through providing valuable offers to customers, does the efficient distribution network help reducing cost. The multiple sales channels do also make it possible for Staples to take advantage of sudden demand shifts and neutralize threats from competitors. Staples premium help reducing switching cost and increase the power over buyers, this helps with the maintaining revenue growth. The support from Sycamore has value in the sense of the expertise gained from running a retail operation.

Rarity:
If the strategic capability is common among competitors, then is it unlikely to be a sustainable competitive advantage. Both multiple channels and the product portfolio are not rare in the retail business. For instance, Office Depot possesses almost the same product portfolio and sales channels. The distribution network on a national level is not rare either, but the level of efficiency provided in the network is rare, when comparing the day inventory outstanding. Membership programs in the retail industry is a very common practice, for instance is Amazon prime is widely used membership program and with Amazon prime business is amazon also introduction the concept to the B2B segment. The support from Sycamore is considers rare given the low investment rate of PE funds in the retail business.

Imitability:
This criteria describes the level of difficulty competitors would have to imitate the strategic capability. A high level of inimitability could be because a high level of complexity stemming from internal linkages or external interconnectedness, or ambiguity, such as know-how or specific company cultures (Johnson et al., 2013). The distribution network is not deemed hard to imitate but it would require a heavy investment and time to reach the same level of standards. The main factor behind the efficient distribution network seems to be the big distribution centers centralizing the network. There is no indication of a particular know-how or culture that play a significant part in the distribution system. What Sycamore has done previously, has led to returns net of fees considerable higher than its comparable, showing that its operation and investment strategy is hard to imitate.

Organizational support:
The last criteria covers whether an organization is able to support and sustain this competitive advantages. The three strengths mentioned support each other, and together, they form a supportive structure that helps each capability to succeed. The distribution network helps sustain the multiple sales channels which in tune, helps selling the wide product portfolio to a wide variety of customers. The network also helps the membership program succeed, especially with the 30-day invoicing. Staples is well suited to accommodate any changes and alterations proposed by Sycamore.

2.5.9.Strengths

Below is table summarizing the competitive advantages and their level of competitive implication. Only the efficient distribution network and the parenting effect from Sycamore are real, competitive advantages, while the three other capabilities are competitive parities. Only the parenting effect from Sycamore is considered a sustainable competitive advantage, while the efficient distribution network is only temporary. The efficient distribution network, together with Staples premium, wide product portfolio and multiple sales channels do provide a valuable system, but not a system distinctive different from other retailers.

Competitive advantages - Strengths

Strategic capabilities	Valuable	Rare	Inimitable	Supported by the organization	Competitive implication
"Parenting effect" from Sycamore	Yes	Yes	Yes	Yes	Sustainable competitive advantage
Efficient distribution network	Yes	Yes	No	Yes	Temporary competitive advantage
Staples premium	Yes	No	No	Yes	Competitive parity
Wide product portfolio and product related services:	Yes	No	No	Yes	Competitive parity
Multiple sales channels	Yes	No	No	Yes	Competitive parity

2.5.10.Weaknesses

Having laid out both potential opportunities and threat in the external strategic analysis and strengths in the strategic capabilities section, is the next obvious step assessing weaknesses of Staples.

Struggling B2C segment
The retail store sales have been struggling with only red growth rates the last 4 years, averaging (8.9%). Further has the retail store sales per store also experience negative growth rates and is compared to Office Depot lower with around $0.7 million per store as of 2016. The same stores sales have also only showed negative numbers averaging a (4.3%) in growth rate. This indicate a business segment struggling to keep up with the pace of an increasing competing industry, which is considered a weakness.

Dependence on third-party vendors
In the section describing Staples a brief depiction of how Staples also make use of third-party vendors in their supply chains exposing them to risk in terms of quality control, design, function and cost. This also exposes Staples to sudden unanticipated disruptions to the supply chains and may eventually affect sales.

Weak management of declining revenue growth
In the fundamental analysis the retail stores sales per store were lower than Office depots which were mainly due to lack of downsizing employees and stores. This proves that Staples is not managing the down-turn of the business efficiently. Having to cope with a declining business will test any management both in terms of skills and experience. Not dealing with this properly will delay a turnaround and reduce potential benefits

later on. Sycamore Partners has already taken steps to change the top management with announcing J. Alexander Douglas as the new CEO April 2. 2018, who previously served as president of Coca-Cola North America working with all aspects of consumer and B2B operations (Howland, 2018). This proves first that Sycamore Partners deemed the previous management team unable to turn around the business and that Sycamore Partners is not afraid to take actions.

2.6.S.W.O.T.

The SWOT model is a summarizing tool to help depict both future and current positions and lay out external and internal aspects of a company. The numbers attach to each factor describe, each factors magnitude and impact.

S.W.O.T model for Staples			
Strengths	**Weaknesses**	**Opportunities**	**Threats**
"Parenting effect" Sycamore (5)	Struggling B2C segment (4)	Increase in business and consumer consumption (4)	Increasing competition in the office products market (5)
Efficient distribution network (4)	Dependence on third-party vendors (2)	Growing private label products market in the US (4)	Increase in labor cost and interest rate (4)
Wide product portfolio and product related services (2)	Weak management of declining revenue growth (2)	Growth in e-commerce sales (3)	Digitalization of workforce and consumer habits. (3)
Multiple sales channels (2)		Memebership programs (3)	
Staples premium (2)			

2.6.1.T.O.W.S.

The next step is to prepare a TOWS model, bringing a forward look to the components of the SWOT model. The TOWS model has four categories representing different ways to accommodate either the strengths, weaknesses, opportunities or threats. The Maxi-Maxi are strategies that leverage strengths to maximize opportunities, Maxi-Mini are strategies that leverage strengths to minimize threats, Mini-Maxi are strategies that minimize weaknesses by taking advantage of opportunities and Mini-Mini are strategies that minimize weaknesses by avoiding threats.

Maxi-Maxi:

Promoting private labels through online sale channels:

Staples could leverage their efficient distribution network together with their product portfolio and multiple sales channel to maximizing the benefit of the growing trend in e-commerce sales and private label products. By widening the product portfolio to include more own branded products, and at the same time, encourage to sell through online channels, by lower price offerings and advertising would it potential increase revenue. Supported by the distribution network, would not only be sustainable by a highly efficient operation, but also lower the dependency on third-party vendors.

Increase focus on membership offers:

With Sycamores expertise and connections to the retail industry, and Staples ongoing membership programs, is their great opportunity to increase revenue by increasing the focus on developing membership programs

given the potential increase in future sales values. The growing business and consumer confidence will also increase the demand for products and with the growing tendency of memberships practice in the retail business is there even greater potential.

Maxi-Mini:

Carve-out Staples into a focused B2B segment.

Supported by Sycamores expertise, the wide product portfolio and efficient distribution network can Staples minimize the threats of increase labor cost, digitization of consumer habits and increase competition, by focusing on only the B2B segment. Carving-out the B2C will heavy reduce the workforce, make the only sales channel online, and help divert more focus on the membership programs of larger clients. The carve-out will help the refocusing of Staples and as intended with the 20/20 plan, converge towards a distribution business instead of a retail business.

Focus on reducing cost:

Sycamore has great experience in performing cost cutting and operational efficiency programs, greatly increasing the value of retail businesses. The reduction in cost would also result in lay-offs reducing the effect of increase labor cost and make Staples more competitive and cable of competing. This will also include changes in the upper management and assigning a new management with other skill-sets and experience. The efficient distribution network will also play a big part with further reduce cost and labor cost, through further efficiency initiatives. This will overall improve ROIC through increase capital turnover and improved margins.

Mini-Maxi:

Promoting private labels through online sale channels:

This strategy has already been mentioned and will not only reduce the dependency on third party vendors but will also help stabilize revenue growth given the increase growth rate in both online sales and private labels.

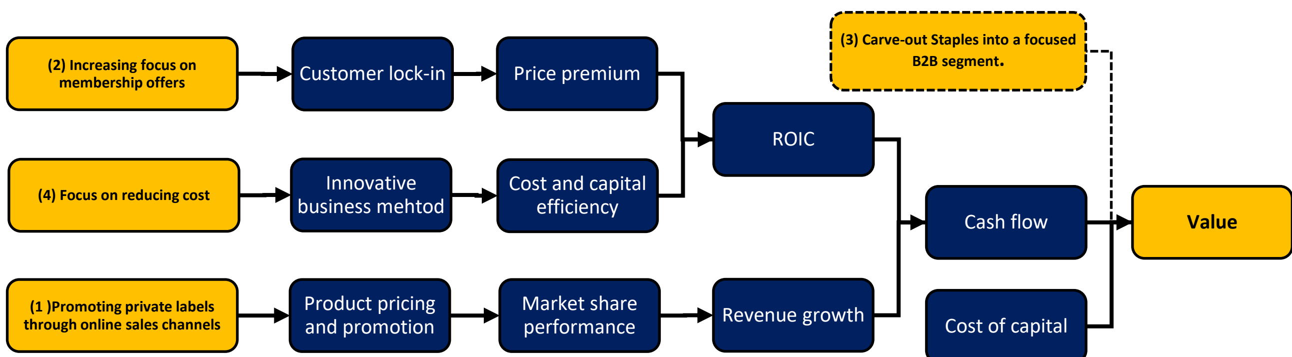
Mini-Mini:

Carve-out Staples into a focused B2B segment.

The carve-out will reduce the labor force and remove the struggling B2C segment and help Staples be more competitive able. This will also make Staples more flexible in terms of their product portfolio, by not having to manage physical stores stocks and inventories, and more able to keep up with the digitalization.

T.O.W.S		
	Internal factors	
External factors	**Strengths**	**Weaknesses**
Opportunities	**Maxi-Maxi:** (1)Promoting private labels through online sales channels; (2) Increase focus on membership offers	**Maxi-Mini:** (3)Carve-out Staples into a focused B2B segment. (4)Focus on reducing cost:
Threats	**Mini-Max:** (1)Promoting private labels through online sale channels:	**Mini-Mini:** (3)Carve-out Staples into a focused B2B segment.

These five strategies will be the base for forecasting the financial performance of Staples and can be related to the conceptual framework of the value creation in buyouts. Promoting private labels through online sales channels and increase focus on membership offers can both be categorized as corporate refocusing, with its redefining of key strategic variables, such as change in customer service, reorganization of distribution channels, and changes in pricing. This is a primary value creation lever implemented in both the acquisition and holding phase and is derived from both intrinsic and extrinsic sources. The carve-out of staples into a focused B2B segment represent an optimization of corporate scope and is a value capturing lever taking advantage of the "conglomerate discount effect", stating that dividing a multi-unit business make each individual unit more valuable on an aggregated level, compared to when they were combined into a single unit. This is done in the acquisition and holding phases and is derived from extrinsic sources. Sycamore is not new to this procedure and has done it successful with The Jones Group in 2014. The focus on reducing cost covers all the different levers regarding increasing operation performance and comprises of cost cutting and margin improvement, together with reducing capital requirements and removing managerial inefficiencies. Primary value creation lever deriving from both intrinsic and extrinsic sources.



See appendix 9 for full strategic overview options.

PART 3

3.1.The Transaction

Merger

On June 28, 2017 it was announced that Sycamore Partners Management, L.P. would acquire Staples Inc. Part of the transaction was Arch Parent, Inc. (parent), a company established by Sycamore Partners (sponsor) to undertake the transaction. The transaction itself was executed through a merger of Staples and a wholly owned subsidiary of the parent, Arch Merger Sub (Merger Sub). The merger sub merging with Staples Inc. (target) finalized the transaction. The merger agreement between Arch Merger Sub and Staples was done through a $10.25 per share cash offer, for all the targets common stock (8-k). This concept of sponsors creating companies (acquisition vehicles) in order to buy targets and finalizing the deal by merging the target and the acquisition vehicle has been described in the theory chapter at an earlier point in the thesis.

Carve-out

After the transaction took place it was announced that Staples would be carved-out into two separated companies. Staples will be split into a retail unit and a B2B unit, North American Delivery (NAD). This separation is expected to generate $1,350 million through a potential sell off of the retail unit (8-k).

Financing

The information regarding the financing was extracted from a Form 8-K, released by Staples on August 7, 2017. The following table will present the basic financing structure of the Staples deal.

The financing	
Sources	
Principal Debt	$4,250
Cash from sponsor	$1,612
Proceeds from the carveout transaction	$1,350
Cash on balance sheet	$860
Total sources - Staples, Inc.	**$8,072**
Uses	
Staples Inc. Equity purchase price	$6,766
Redemption of Existing Notes	$1,008
Fees and expenses related to the Merger	$145
Fees and expenses related to the financing	$153
Total uses	**$8,072**

The principal debt is comprised of:

Principal debt *($ in millions)*			
Type	**Amount**	**Term**	**Fee**
Senior secured asset based revolving credit facility	$1,200 of which $250 is expted to be drawn	5	$15
Senior secured term loan facility	$2,400	7	$78
Senior unsecured (Bridge loans)	($1,600)	1	$24
Senior Note	$1,600	8	$36
Total	**$4,250**		**$153**

Principal debt		
Senior secured asset based revolving credit facility		
Spread	3%	
LIBOR Floor	1.25%	
Commitment fee on unused portion	0.375%	
Senior secured term loan facility		
Spread	3%	
LIBOR Floor	1.25%	
Repayment schedule	1.0%	Per annum, bullet at maturity
Note		
Coupon	4.38%	

There was no information disclosed about the structure of the principal debts. But as revolving credit facility and term loan interest rates are usually based on LIBOR plus a fixed spread (Rosenbaum 2009), the interest rates used here will be based on LIBOR as well. The typical margin spread for an asset based revolving credit facility is 175bps to 300bps (Guide to Asset Based Lending, BVCA, 2015). Given that Staples will increase its leverage position as part of the leveraged buyout, it is assumed that the spread will equal 300bps. It is further assumed that LIBOR floor is equal to 1.25%. The commitment fee on unused portion was described as *"As the amount drawn on the New ABL Credit Facility is expected to be less than 50% of the available capacity, the undrawn portion of the commitments under the New ABL Credit Facility will be subject to an unused commitment fee of 37.5bps per annum." (*8-k).

The assumption on the senior secured term loan facility´s spread is based on Moody´s credit rating of Staples´ senior secured bank credit facility of Ba3 ("Moody´s downgrades Staples, Inc.; Assigns CFR B1", 2017). The NYU Stern's default spread on a Ba3 is 2.98% (NYU Stern), which has been rounded up to 3% for reasons of simplicity. It is assumed that repayment is equal to 1% on an annual basis with a bullet at maturity. The senior note´s coupon rate is based on Staple´s previous rate of 4.375% plus a default spread of 2.98%, representing the corporate family rating by Moody´s, totaling to 7.36%.

Cash from sponsors comprises Sycamore´s equity investment of $1,385 million and the remaining equity stake being contributed by Neuberger Berman Private Equity or an investment funds affiliated with Harbour Vest Partners. The Definite Proxy Statement mentions a total equity financing of $1,920, where Neuberger Berman Private Equity and an investment fund affiliated with Harbour Vest Partners, contribute $270 million and $265 million respectively. These values are in conflict with the stated cash from sponsors of only $1,612 million. It is assumed that one of the two's equity stake is included in the proceeds from the carve-out transaction. This thesis is about assessing whether Sycamore partners paid an appropriate price. Individual equity contributor´s returns on investment are of less importance. As long as it is assumed that Sycamore´s equity contribution is fixed will the remaining allocation of equity be irrelevant in terms of return. Not all cash is used for the repayment of debt. No further details regarding this consideration have been disclosed. The equity purchase price is based on 656.7 million shares of common stock outstanding and 11.0 million shares underlying outstanding equity awards. Further it is estimated that $78 million will be subtracted, representing a post-merger cost. With the cash offer of $10.25 per share this results in a total of $6,766 million in enterprise value pre-net debt. The redemption of existing notes comprises concerns two notes which are estimated to be redeemed for $1,008 million, using cash on hand. The two kinds of fees on the bottom of the uses account for the financing and carve-out expenses.

The following statements represent information from 8-K filings regarding the merger, financing and carve-out. The notes are directly taken from the filed document and are attached in appendix 10. These numbers will be the basis for the LBO and DCF model, including minor adjustments for debt and fees. The removal of SPS represents the sale of the commercial printing solution business agreed upon pre-merger. It is noted that

the statements is based on numbers from April 29 2016 (first quarter), while both comparable valuation and precedent valuation were based on second quarter numbers.

Balance sheet - April 29, 2017

($ in millions)

	Staples. Inc. (April 29, 2017)	Merger Adjustments	*Notes*	Financing Adjustments	*Notes*	Carveout Transaction Adjustments	*Notes*	Pro Forma Condensed Cosolidated
Cash and cash equivalents	$1,290	$(6,911)	*(a),(h)*	$6,051	*(i),(j),(k)*	$(109)	*(l)*	$321
Receivables, net	1,342	-		-		(150)	*(l)*	1,192
Merchandise inventories, net	1,623	-		-		(896)	*(l)*	727
Prepaid expenses and other current assets	207	-		-		(70)	*(l)*	137
Assets of discontinued operations	123	-		-		(123)	*(l)*	-
Total current assets	**$4,585**	**$(6,911)**		**$6,051**		**$(1,348)**		**$2,377**
Property and equipment, net	$1,071	$576	*(c)*	-		$(754)	*(l),(m)*	$893
Goodwill	1,290	1,129	*(g)*	-		(262)	*(l),(m),(n),(o)*	2,157
Intangible assets, net of accumulated depreciation	170	2,906	*(d)*	-		(90)	*(l),(m)*	2,986
Other assets	394	242	*(e)*	13	*(i),(j)*	(371)	*(l),(m)*	278
Total assets	**$7,510**	**$(2,058)**		**$6,064**		**$(2,825)**		**$8,691**
Liabilities and Stockholders´ Equity								
Account payable	$1,655	-		-		$(555)	*(l)*	$1,100
Accrued expenses and other current liabilities	933	-		-		(397)	*(l)*	536
Debt maturing withing one year	521	-		(491)	*(i),(j)*	(17)	*(l)*	13
Current liabilities of discontinued operations	85	-		-		(85)	*(l)*	-
Total current liabilities	**$3,194**	**-**		**$(491)**		**$(1,054)**		**$1,649**
Long-term debt	$526	-		$3,627	*(i),(j)*	$(24)	*(l)*	$4,129
Other long term liabilities	422	1,416	*(e),(f),(h)*	-		(397)	*(l),(m),(n)*	1,441
Total liabilities	**$4,142**	**$1,416**		**$3,136**		**$(1,475)**		**$7,219**
Stockholders' equity:								-
Preferred stock	-	-		-		-		-
Common stock	1	(1)	*(b)*	-		-		-
Additional paid-in capital	5,079	(5,079)	*(b)*	2,962	*(k)*	(1,350)	*(o)*	1,612
Accumulated other comprehensive (loss)/,income net of tax	(497)	497	*(b)*	-		-		-
Retained Earnings (Accumulated deficit)	4,196	(4,302)	*(b),(h)*	(34)	*(i),(j)*	-		(140)
Treasury stock	(5,419)	5,419	*(b)*	-		-		-
Noncontrolling Interest	8	(8)	*(b)*	-		-		-
Total stockholders' equity	**$3,368**	**$(3,474)**		**$2,928**		**$(1,350)**		**$1,472**
Total liabilities and stockholders' equity	**$7,510**	**$(2,058)**		**$6,064**		**$(2,825)**		**$8,691**

Source: 8-k

Income Statement - LTM April 29, 2017

52 Weeks Ended April 29, 2017

($ in millions)

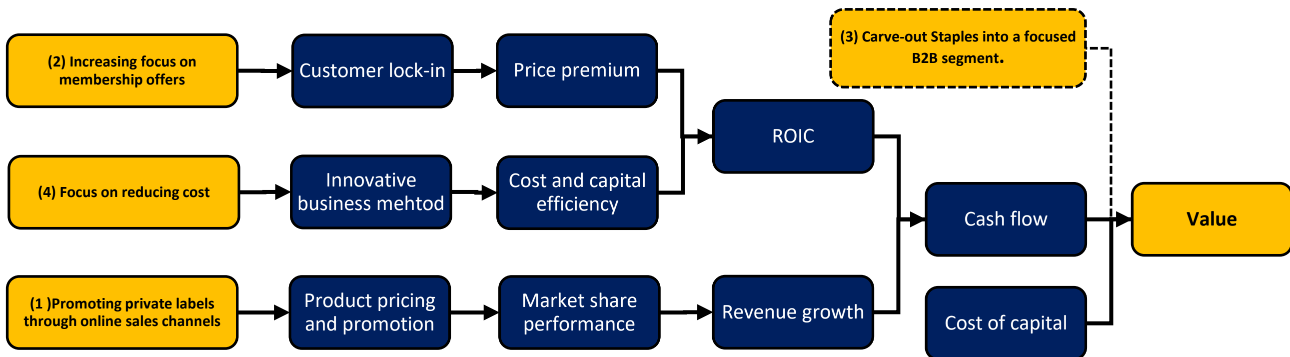
	Staples Inc. (LTM, April 29, 2017)	Merger Adjustments	*Notes*	Financing Adjustments	*Notes*	Carveout Transaction Adjustments	*Notes*	Removal of SPS	*Notes*	Pro Forma Condensed Consolidated
Sales	**$17,085**	**-**		**-**		**$(6,912)**	*(g)*	**$(59)**	*(j)*	**$10,114**
% of total sales	*100%*	*0%*		*0%*		*40%*		*0%*		*58%*
Cost of goods sold and occupancy costs	$12,524	$31	*(b),(c)*	0		$(4,733)	*(g),(h)*	$(49)	*(j)*	$7,773
Gross profit	**$4,561**	**$(31)**		**0**		**$(2,179)**		**$(10)**		**$2,341**
% of Gross profit	*100%*	*1%*		*0%*		*48%*		*0%*		*51%*
Selling, general and administrative	$3,641	$16	*(b)*	-		$(1,791)	*(g),(h)*	$(6)	*(j)*	$1,860
Impairment of goodwill and long-lived assets	664	-		-		(662)	*(g)*	-		2
Restructuring charges	282	-		-		(18)	*(g)*	-		264
Amortization of intangibles	42	106	*(a)*	-		(21)	*(h)*	-		127
Total operating expenses	**$4,629**	**$122**		**0**		**$(2,491)**		**$(6)**		**$2,253**
% of Total operating expenses	*100%*	*-2.6%*		*0%*		*53.8%*		*0%*		*48.7%*
(Loss) gain on sale of businesses and assets, net	$(24)	0		0		$(1)	*(g)*	0		$(25)
Operating (loss) income	**$(92)**	**$(153)**		**0**		**$311**		**$(4)**		**$63**
% of Operating (loss) income	*100%*	*-166%*		*0%*		*338%*		*-4%*		*-68%*
Interest income	$4	0		0		$(2)	*(g)*	0		$2
Loss on early extinguishment of debt	(26)	-		-		-		-		(26)
Interest expense	(48)	-		(221)	*(e)*	-		-		(269)
Other income (expense), net	13	-		-		(1)		-		12
(Loss) income from continuing operations before income taxes	**$(149)**	**$(153)**		**$(221)**		**$308**		**$(4)**		**$(218)**
Income tax expense (benefit)	$134	$(58)	*(d)*	$(85)	*(f)*	$(80)	*(g,(i)*	$(1)	*(j)*	$(90)
(Loss) income from continuing operations	**$(283)**	**$(95)**		**$(136)**		**$388**		**$(3)**		**$(128)**
% of (Loss) income from continuing operations	*100%*	*-34%*		*-48%*		*137%*		*-1%*		*45%*

Source: 8-k

3.2.Forecasting

3.2.1.Strategic framework

The proposed strategies in the strategic analysis can be translated into the strategic framework used in the fundamental analysis, which is shown below. The promotion of private labels through online sales channels can be categorized as a product pricing and promotion growth tactic. This tactic creates value by increasing the market share of the company and is very common practice in mature markets. This tactic, however, is in most cases temporary, due to the expected retaliation from competitors (Koller et al., 2015). The value generated from this action is therefore assumed to only have a short- to mid-term effect on revenue growth. Increasing focus on memberships is a customer lock-in strategy with the goal of increasing the switching costs of the buyer, reducing their power and thus resulting in opportunities to charge premium prices. This is expected to have a positive effect on key margins and revenue, but only in a moderate effect as the costs associated with the strategies are considerable, due to the extra service hours and other benefits included in the membership program. The carve-out of the B2B segment creates value through value capturing, which is a financial arbitrage, since it is not increasing the underlying financial performance. This value creation will manifest itself through a potential higher exit multiple than the entry multiple. The potential benefits that operations may gain from the carve-out will be reflected in this multiple increase, but it will also be affected by market expectations and external factors.



3.2.2.Scenarios

A scenario-based valuation is the more appropriate approach when dealing with an uncertain environment. The purpose of the different scenarios is to cover different prospects of the business and financial performance in the light of the indicated strategies. The range of these scenarios will, as a result, be subject to the level of financial performance.

The first scenario will be **business as usual**, representing an industry without major changes, stable revenue development and margins and capital efficiency remaining constant at 2016 levels.

The second scenario will represent a **business improvement** scenario with improved margins and capital efficiency as a result of a successful implementation and execution of the mentioned strategies. The revenue will also be expected to increase more as a result of the strategies and more favorable macro-environmental trends.

The third case will represent a **business downturn**. This scenario represents a failed implementation of strategies and an industry with increasing competition resulting in lower prices and revenue growth.

The last scenario will be called **management** and will reflect revenue and line items as forecasted by the deal associates. This information is provided through the definitive proxy statement.

3.2.3.Assumptions

Below is a table of the main historical operation ratios, which will be used to run the LBO model. These operational ratios can be translated into the performance of both revenue growth and ROIC. The sales growth is directly linked to improvements in revenue growth, which will be coming either from organic volume growth or from product pricing and promotion. The margins for COGS and SG&A are connected to both the price premium and cost and capital efficiency. Moreover, capital expenditures are linked to cost and capital efficiency, as part of their focus on cutting costs. The DSO, DIH and DPO are also connected to improvements in ROIC. Other expenses/ (income) are kept at zero, while prepaid and other current assets and other current liabilities are kept constant.

Historical key operational ratios - Staples

Adjusted Income statement	2014	2015	2016	Ave.	Std.dev
Sales (% YoY growth)	(14.8%)	(4.7%)	(2.8%)	(7.4%)	5.3%
COGS (% margin)	74.4%	73.8%	73.9%	74.0%	0.3%
SG&A (% margin)	18.8%	19.2%	19.0%	19.0%	0.2%
Other expens / (income) (% of sales)	0.5%	0.0%	1.4%	0.6%	0.5%
Depreciation (% of sales)	2.1%	2.1%	2.1%	2.1%	0.0%
Amoritization (% of sales)	0.3%	0.4%	0.3%	0.3%	0.0%
Cash flow statement					
Capital expenditures (% of sales)	1.9%	1.9%	2.1%	2.0%	0.1%
Current assets					
Days Sales outstanding (DSO)	34.9	33.8	30.8	33.2	1.7
Days Inventory Held (DIH)	41.5	38.3	35.3	38.3	2.5
Current liabilities					
Days payable outstanding (DPO)	48.1	46.8	45.9	46.9	0.9
Accrued liabilities (% of sales)	4.4%	3.4%	3.4%	3.7%	0.5%

Scenario 1). Base:

The base scenario represents the status quo. All ratios are kept constant and only revenue growth is altered. The revenue growth is assumed to be falling and converging towards 0% in later years.

Scenarios: 1) Base

Adjusted Income statement	2016	Short Term (2019-2021)	Meditum Term (2022-2024)	Long Term (2025-2027)	Ave.	Std.dev
Organic volume growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Product pricing and promotion	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Nominal revenu growth	(2.8%)	0.0%	0.0%	0.0%	0.0%	0.0%
COGS (% margin)	76.9%	76.9%	76.9%	76.9%	76.9%	0.0%
SG&A (% margin)	14.8%	14.8%	14.8%	14.8%	14.8%	0.0%
Other expens / (income) (% of sales)	0.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Amoritization (% of sales)	1.4%	1.4%	1.4%	1.4%	1.4%	0.0%
Cash flow statement						
Capital expenditures (% of sales)	1.5%	1.5%	1.5%	1.5%	1.5%	0.0%
Current assets						
Days Sales outstanding (DSO)	43.02	43.02	43.02	43.02	43.02	-
Days Inventory Held (DIH)	34.14	34.14	34.14	34.14	34.14	-
Current liabilities						
Days payable outstanding (DPO)	51.65	51.65	51.65	51.65	51.65	-
Accrued liabilities (% of sales)	5.3%	5.3%	5.3%	5.3%	5.3%	0.0%

Scenario 2). Business improvement

The revenue improvements derive from two sources. Organic volume growth is revenue growth originating from improved market conditions as well as product pricing and promotion changes as part of the

implementation of the established strategies. It is assumed that given the prospect of increase in both consumer and business confidence, as pointed out by the strategic analysis, the market for office supplies will improve and affect Staples´ revenue in a positive way. The product pricing and promotion derives from the private labels promoted through online sales channels. It can be assumed that this will increase the market share as well as revenue, however, it is also likely that the effect will slow down in the long-term as a result of retaliations from competitors. Price premiums and improved margins are also the result of improving COGS and SG&A margins, which are likely to take place as a consequence of the customer lock-in strategy. The margins are improved even further when taking into consideration cost cutting initiatives, especially given that the efficient distribution network is likely to reduce COGS margins. Capital expenditures are expected to increase as higher investments are required to sustain the operation. The both DSO and DIH are expected to, as a consequence of the initiatives of efficiency improvement.

Scenarios: 2) Business improvment

Adjusted Income statement	2016	Short Term (2019-2021)	Meditum Term (2022-2024)	Long Term (2025-2027)	Ave.	Std.dev
Organic volume growth	0.0%	1.0%	1.0%	1.0%	1.0%	0.0%
Product pricing and promotion (1)	0.0%	2.0%	1.0%	0.5%	1.2%	0.6%
Nominal revenu growth	(2.8%)	3.0%	2.0%	1.5%	2.2%	0.6%
COGS (% margin)(2)	76.9%	76.0%	75.0%	75.0%	75.3%	0.5%
SG&A (% margin)(2)	14.8%	14.0%	14.0%	14.0%	14.0%	0.0%
Other expens / (income) (% of sales)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Amoritization (% of sales)	1.4%	1.4%	1.4%	1.4%	1.4%	0.0%
Cash flow statement						
Capital expenditures (% of sales)(2)	1.5%	2.5%	2.5%	2.5%	2.5%	0.0%
Current assets						
Days Sales outstanding (DSO)	43.02	42.00	41.00	41.00	41.33	0.47
Days Inventory Held (DIH)	34.14	33.50	33.00	32.50	33.00	0.41
Current liabilities						
Days payable outstanding (DPO)	51.65	51.65	51.65	51.65	51.65	-
Accrued liabilities (% of sales)	5.3%	5.0%	5.0%	5.0%	5.0%	0.0%

Scenario 3). Business downturn.

In this scenario the revenue will keep falling and converge towards zero in the long-term. The fall represents the consequences of an intense business environment, where especially the entrance of both Walmart and Amazon results in a significant increase of rivalry. The reduction in revenue from product pricing and promotion is assumed to reflect revenue reduction as a result of the carve-out. It seems difficult to separate Staples´ B2B from its physical stores as they provide a touch point with customers and a distribution advantage (Unglesbee, 2017). The margins are expected to increase as a result of failed implementation of strategies and competitors imitating or acquiring their own efficient distribution network. This translates also into a higher DIH, increasing the required working capital requirements as a result of less efficient distribution network.

Scenarios: 3) Business downturn

Adjusted Income statement	2016	Short Term (2019-2021)	Meditum Term (2022-2024)	Long Term (2025-2027)	Ave.	Std.dev
Organic volume growth	0.0%	(1.0%)	(0.5%)	0.0%	(0.5%)	0.4%
Product pricing and promotion	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Nominal revenu growth	(2.8%)	(1.0%)	(0.5%)	0.0%	(0.5%)	0.4%
COGS (% margin)	76.9%	77.00%	77.25%	77.25%	77.2%	0.1%
SG&A (% margin)	14.8%	15.00%	15.25%	15.25%	15.2%	0.1%
Other expens / (income) (% of sales)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Amoritization (% of sales)	1.4%	1.4%	1.4%	1.4%	1.4%	0.0%
Cash flow statement						
Capital expenditures (% of sales)	1.5%	1.50%	1.50%	1.50%	1.5%	0.0%
Current assets						
Days Sales outstanding (DSO)	43.02	43.00	43.00	43.00	43.00	-
Days Inventory Held (DIH)	34.14	34.50	34.50	34.50	34.50	-
Current liabilities						
Days payable outstanding (DPO)	51.65	51.65	51.65	51.65	51.65	-
Accrued liabilities (% of sales)	5.3%	5.3%	5.3%	5.3%	5.3%	0.0%

Scenario 4). Management

The management scenario represents the forecast scenario made by the financial advisors and associates connected to the deal. These numbers have been extracted from the definitive proxy statement and have undergone adjustments in order to be translatable into the used assumptions framework.

Scenarios: 4) Management

	Proforma 2017	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027	Ave.	Std.dev
		Projection period											
Revenue													
Consolidated revenue, proxy statement	$18,247	$17,851	$18,104	$18,319	$18,569	$18,856	$19,183	$19,509	$19,880	$20,258	$20,642	$19,117	$895
Revenu growth		(2.2%)	1.4%	1.2%	1.4%	1.5%	1.7%	1.7%	1.9%	1.9%	1.9%	1.2%	1.2%
B2B % of total revenue 2016		59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	59.2%	0.0%
B2B revenue projection	$10,114	$10,567	$10,717	$10,845	$10,993	$11,162	$11,356	$11,549	$11,768	$11,992	$12,220	$11,317	$530
B2B revenue growth		4.5%	1.4%	1.2%	1.4%	1.5%	1.7%	1.7%	1.9%	1.9%	1.9%	1.9%	0.9%
COGS, margin %													
Adjusted EBITDA (Management)	$1,178	$1,258	$1,330	$1,358	$1,382	$1,407	$1,435	n/a	n/a	n/a	n/a	$1,362	$57
Adjusted EBITDA (Management) margin, %	6.5%	7.0%	7.3%	7.4%	7.4%	7.5%	7.5%	n/a	n/a	n/a	n/a	7.4%	0.1%
Historical EBITDA margin, %	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	8.3%	n/a	n/a	n/a	n/a	8.3%	0.0%
Difference	-1.8%	-1.3%	-1.0%	-0.9%	-0.9%	-0.8%	-0.8%	n/a	n/a	n/a	n/a	(0.9%)	0.1%
Historical COGS margin, %	76.9%	76.9%	76.9%	76.9%	76.9%	76.9%	76.9%	n/a	n/a	n/a	n/a	76.9%	0.0%
New COGS margin, %	75.0%	75.6%	75.9%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	0.1%
Days Inventory Held (DIH)													
(inc.) / dec in Net working capital, management		$(21)	$(52)	$(30)	$(28)	n/a	n/a	n/a	n/a	n/a	n/a	$(32.8)	$11.6
Receivables, net	$1,192	$1,245	$1,263	$1,278	$1,296	n/a	n/a	n/a	n/a	n/a	n/a	$1,271	$18
Merchandise inventories, net	$710	$716	$675	$651	$630	n/a	n/a	n/a	n/a	n/a	n/a	$668	$32
Account payable	$1,074	$1,131	$1,151	$1,166	$1,182	n/a	n/a	n/a	n/a	n/a	n/a	$1,157	$19
Accrued expenses and other current liabilities	$536	$560	$568	$575	$583	n/a	n/a	n/a	n/a	n/a	n/a	$571	$8
Net working capital	$(292)	$(271)	$(219)	$(189)	$(161)	n/a	n/a	n/a	n/a	n/a	n/a	$(210)	$41
(inc.) / dec in Net working capital		$(21)	$(52)	$(30)	$(28)	n/a	n/a	n/a	n/a	n/a	n/a	$(33)	$12
New DIH	34.1	32.7	30.3	28.9	27.5	27.5	27.5	27.5	27.5	27.5	27.5	28.5	1.7
Capital expenditures (% of sales)													
Capital expenditures, management	$(300)	$(263)	$(251)	$(235)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	$(250)	$11
Capital expenditures (% of sales)	1.6%	1.5%	1.4%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	0.1%

The B2B revenue projection is based on the forecasted consolidated revenue made by the financial advisors and the 2017 portion of B2B revenue is taken from the pro-forma statement.

There was no direct forecasting material of either COGS or SG&A available. It is assumed that SG&A is hold constant and COGS variable, as COGS are closer related to variations in revenue. The only data available was the adjusted EBITDA, making it possible to calculate the adjusted EBITDA margin. This margin is based on the consolidated revenue and not the B2B revenue, reflecting the managements expected EBITDA margin. By assuming a constant SG&A margin and further assuming no other expenses or income, the only variable that can change in the COGS margin. Having access to the historical EBITDA margin through subtracting the combined margins of SG&A and COGS from 100%, the difference between the two EBITDA margins can be established. This difference will reflect the expected alterations to the COGS margins, which will be applied

to the new COGS margins. The adjusted EBITDA was only projected to 2023, as a result the 2023 was hold constant for the remaining projected years.

In terms of the working capital, was the only information disclosed the expected change in net working capital. With the assumption that DSO, DPO and accrued liabilities is constant, makes way of projecting net working capital improvements through changes in DIH. The new working capital was calculated based on the historical ratios leading to a calculation of change in net working capital. Solving for a change in net working capital equal to the disclosed change in net working capital by changing only the DIH, result in projected DIH. This result in making DIH the main driver for improvement in the working capital, which is fitting given the previous discussed distribution network. The projection of change in net working capital was limited to 2021, the remaining period is based on the 2021 number.

The capital expenditures of revenue is based on the percentage of disclosed projected capital expenditures to consolidated projected revenue. The remaining period is based on the last stated projection.

The next section will explain the LBO model based on the base scenario.

3.3.LBO Model

The transaction of Staples has already been evaluated on the basis of both a comparable and precedent valuation. In order to complement these two valuations, the next step would be to evaluate the transaction of Staples through both an LBO model and an APV model. The LBO analysis will include first a short discussion of the overall approach, then a description of each statement and schedule, followed by a return analysis, and lastly an overall assessment of the valuation range found presented by a football field.

The LBO model will take its starting point in the numbers provided in the comparable and precedent analysis which will be adjusted for the merger, financing and carve-out. Because of the carve-out action, the LBO model will not be based on the reorganized statements of the fundamental analysis, because the level of detail is not sufficient and would require the making of assumptions that render the model less valuable in regard to projection value. For instance, there is no information disclosed about the changes made to either deferred tax or tax. Keeping the model simple will also help to better project the value based on a few significant drivers of value, described and discussed in previous analyses. The carve-out represents a challenge in terms of converting the numbers into the model, resulting in minor adjustments.

The following step will describe the LBO model with the base scenario assumptions for simplicity.

3.3.1.Income statement

The income statement is representing the most vital calculations and is a continuation of the adjusted income statement made in the comparable and precedent analysis. The LTM together with the carve-out are based on the calculations described in the transaction, with minor adjustments. As the 2016 Other expenses/(income) is adjusted for non-recurring items is the LTM adjusted by deriving the other expenses/(income) base on the same percentage of sales as 2016. The carve-out adjustments aggregated together but is similar to the transaction description with the exception of adjustments to other expenses/(income), which is decreased with the same percentage amount as revenue was. The adjustment to depreciation is based on the segmentation between B2B and the B2C segments. The projection period describes in detail the total cash interest expenses, total interest expenses and net interest expenses. The interest cost, fees and amortization of deferred fees are all described in the debt schedule. Regarding the interest income is it assumed that Staples is earning a 0.5% interest on the total cash balance, but only when the cash balance is positive. This interest income is based on the average cash balance. The tax rate of 33%

is hold constant through all scenarios and is based on the effect marginal tax rate on EBITA calculated in the fundamental analysis.

Below in yellow are the stated assumptions where other expenses / (income) is assumed 0% regardless of the scenario and depreciation (% of sales) is unused as depreciation is based on a PPE schedule.

3.3.2.Balance sheet

The adjustments to the balance sheet are separated into two parts. The adjustments representing the adjustment from the merger and financing, and the carve-out representing the change from the carve-out action. Minor adjustments have been made to accommodate the financing fees, redemption of the existing debt. The existing debts are removed from the balance sheet and the new debt is added without the reducing of fees which has been consolidated in the deferred financing fees. There is also a redemption of the existing loan of $39 million which was allocated to the B2C unit in the transaction, to account for this has the cash and cash equivalent been added with the $39 million. This could also have been added to the equity, but as the cash will be used to pay off debt will it eventually affected the equity positivity. Below is the various assumption stated.

($ in millions, fiscal year ending January 28)

Income statement

	Historical period				Carveout			Projection period									
				LTM			Proforma	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	2014	2015	2016	4/29/2017	+	-	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Sales	$19,684.0	$18,764.0	$18,247.0	$17,085.0	0.0	$(6,971.0)	$10,114.0	$10,114.0	$10,114.0	$10,114.0	$10,114.0	$10,114.0	$10,114.0	$10,114.0	$10,114.0	$10,114.0	$10,114.0
%,growth	*n/a*	*(4.7%)*	*(2.8%)*	*n/a*			*(44.6%)*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Cogs	14,645.0	13,847.0	13,491.0	12,524.0	$31.0	$(4,782.0)	$7,773.0	7,773.0	7,773.0	7,773.0	7,773.0	7,773.0	7,773.0	7,773.0	7,773.0	7,773.0	7,773.0
Gross profit	$5,039.0	$4,917.0	$4,756.0	$4,561.0	$31.0	$(11,753.0)	$2,341.0	$2,341.0	$2,341.0	$2,341.0	$2,341.0	$2,341.0	$2,341.0	$2,341.0	$2,341.0	$2,341.0	$2,341.0
%, margin	*25.6%*	*26.2%*	*26.1%*	*26.7%*			*23.1%*	*23.1%*	*23.1%*	*23.1%*	*23.1%*	*23.1%*	*23.1%*	*23.1%*	*23.1%*	*23.1%*	*23.1%*
SG&A	3,691.0	3,605.0	3,467.0	3,282.0	$16.0	$(1,797.0)	$1,501.0	1,501.0	1,501.0	1,501.0	1,501.0	1,501.0	1,501.0	1,501.0	1,501.0	1,501.0	1,501.0
%, sales	*18.8%*	*19.2%*	*19.0%*	*19.2%*			*14.8%*	*14.8%*	*14.8%*	*14.8%*	*14.8%*	*14.8%*	*14.8%*	*14.8%*	*14.8%*	*14.8%*	*14.8%*
Other expenses/(income)	90.0	7.0	247.0	231.3		$(136.9)	$94.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBITDA	$1,258.0	$1,305.0	$1,042.0	$1,047.7	$47.0	$(13,686.9)	$745.6	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0
%, margin	*6.4%*	*7.0%*	*5.7%*	*6.1%*			*7.4%*	*8.3%*	*8.3%*	*8.3%*	*8.3%*	*8.3%*	*8.3%*	*8.3%*	*8.3%*	*8.3%*	*8.3%*
Depreciation	405.0	388.0	378.0	359.0		$(191.0)	$168.0	60.2	75.7	91.2	106.8	122.3	137.8	153.4	168.9	184.4	200.0
Amoritization	62.0	67.0	58.0	61.0	$106.0	$(21.0)	$146.0	146.0	146.0	146.0	146.0	146.0	146.0	146.0	146.0	146.0	146.0
EBIT	$791.0	$850.0	$606.0	$627.7	$153.0	$(13,898.9)	$431.6	$633.8	$618.3	$602.8	$587.2	$571.7	$556.2	$540.6	$525.1	$509.6	$494.1
%, margin	*4.0%*	*4.5%*	*3.3%*	*3.7%*			*4.3%*	*6.3%*	*6.1%*	*6.0%*	*5.8%*	*5.7%*	*5.5%*	*5.3%*	*5.2%*	*5.0%*	*4.9%*
Interest Expenses																	
ABL revolving credit facility							0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senior secured term loan facility							126.6	115.0	102.1	84.1	62.9	40.6	17.2	2.6	0.0	0.0	0.0
Senior notes							117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7	117.7
Commitment fee on unused revolver							4.0	4.0	4.5	4.5	4.5	4.5	0.0	0.0	0.0	0.0	0.0
Administrative agent fee							0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
Cash interest expense							248.5	243.5	224.5	206.5	185.3	163.0	134.9	120.3	117.7	117.7	117.7
Amortzation on deferred financing fees							43.3	43.3	19.3	19.3	19.3	19.3	16.3	16.3	0.0	0.0	0.0
Total interest expense							291.7	286.8	243.8	225.8	204.6	182.3	151.2	136.6	117.7	117.7	117.7
Interest income								0.0	0.0	0.0	0.0	0.0	0.0	(0.9)	(2.8)	(5.0)	(7.2)
Net interest expense								286.8	243.8	225.8	204.6	182.3	151.2	135.7	114.9	112.7	110.5
Earnings before taxes								$347.0	$374.5	$377.0	$382.6	$389.4	$405.0	$404.9	$410.2	$396.9	$383.6
Income taxe Expense								114.5	123.6	124.4	126.3	128.5	133.6	133.6	135.4	131.0	126.6
Net income								$232.5	$250.9	$252.6	$256.4	$260.9	$271.3	$271.3	$274.8	$265.9	$257.0
%, margin								*2.3%*	*2.5%*	*2.5%*	*2.5%*	*2.6%*	*2.7%*	*2.7%*	*2.7%*	*2.6%*	*2.5%*

Income Statement Assumptions

	2014	2015	2016	LTM 4/29/2017	+	-	Proforma 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Sales (% YoY growth)	n/a	(4.7%)	(2.8%)	n/a			(44.6%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
COGS (% margin)	74.4%	73.8%	73.9%	73.3%			76.9%	76.9%	76.9%	76.9%	76.9%	76.9%	76.9%	76.9%	76.9%	76.9%	76.9%
SG&A (% margin)	18.8%	19.2%	19.0%	19.2%			14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%
Other expenses / (income) (% of sales)	0.5%	0.0%	1.4%	1.4%			0.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Depreciation (% of sales)	2.1%	2.1%	2.1%	2.1%			1.66%	1.66%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
Amoritization (% of sales)	0.3%	0.4%	0.3%	0.4%			1.44%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Interet income							0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Tax rate								33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%

($ in millions, fiscal year ending January 28)

Balance sheet

	Opening	Adjustments		Carveout		Pro forma	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
							Projection period									
	2017	+	-	+	-	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Cash and cash equivalents	$1,290	$6,051	$(6,911)	$39	$(109)	360	-	-	-	-	-	(0)	341	776	1,217	1,664
Receivables, net	1,342				$(150)	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192	1,192
Merchandise inventories, net	1,623				$(896)	727	727	727	727	727	727	727	727	727	727	727
Prepaid expenses and other current assets	207				$(70)	137	137	137	137	137	137	137	137	137	137	137
Assets of discontinued operations	123				$(123)	-	-	-	-	-	-	-	-	-	-	-
Total current assets	**$4,585**	**$6,051**	**$(6,911)**	**$39**	**$(1,348)**	**$2,416**	**$2,056**	**$2,056**	**$2,056**	**$2,056**	**$2,056**	**$2,056**	**$2,397**	**$2,832**	**$3,273**	**$3,720**
Property and equipment, net	$1,071	$576			$(754)	893	988	1,068	1,132	1,180	1,213	1,231	1,233	1,219	1,190	1,145
Goodwill	1,290	$1,129			$(262)	2,157	2,157	2,157	2,157	2,157	2,157	2,157	2,157	2,157	2,157	2,157
Intangible assets, net of accumulated depreciation	170	$2,906			$(90)	2,986	2,840	2,694	2,548	2,402	2,256	2,110	1,964	1,818	1,672	1,526
Other assets	394	$255			$(371)	278	278	278	278	278	278	278	278	278	278	278
Deferred financing fees	0	$153			0	153	110	90	71	52	33	16	0	0	0	0
Total assets	**$7,510**	**$11,070**	**$(6,911)**	**$39**	**$(2,825)**	**$8,883**	**$8,429**	**$8,343**	**$8,242**	**$8,125**	**$7,993**	**$7,848**	**$8,029**	**$8,304**	**$8,570**	**$8,827**
Account payable	$1,655				$(555)	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Accrued expenses and other current liabilities	933				$(397)	536	536	536	536	536	536	536	536	536	536	536
Debt maturing withing one year	521		$(521)		0	-	-	-	-	-	-	-	-	-	-	-
Current liabilities of discontinued operations	85				$(85)	-	-	-	-	-	-	-	-	-	-	-
Total current liabilities	**$3,194**	**0**	**$(521)**	**-**	**$(1,037)**	**$1,636**	**$1,636**	**$1,636**	**$1,636**	**$1,636**	**$1,636**	**$1,636**	**$1,636**	**$1,636**	**$1,636**	**$1,636**
ABL revolving credit facility	0	$250				250	-	-	-	-	-	-	-	-	-	-
Senior secured term loan facility	0	$2,400				2,400	1,963	1,627	1,273	900	507	90	-	-	-	-
Existing term loan	526		$(526)			-	-	-	-	-	-	-	-	-	-	-
Senior notes	0	$1,600				1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600
Other long-term liabilities	422	$1,432			$(397)	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457	1,457
Total liabilities	**$4,142**	**$5,682**	**$(1,047)**	**-**	**$(1,434)**	**$7,343**	**$6,656**	**$6,320**	**$5,966**	**$5,593**	**$5,200**	**$4,783**	**$4,693**	**$4,693**	**$4,693**	**$4,693**
Noncontrolling interest	$8.0		(8)			-	-	-	-	-	-	-	-	-	-	-
Shareholders´ equity	3,360	2,962	(3,432)		$(1,350)	1,540	1,772	2,023	2,276	2,532	2,793	3,065	3,336	3,611	3,877	4,134
Total shareholder equity	**$3,368**	**$2,962**	**$(3,440)**	**-**	**$(1,350)**	**$1,540**	**$1,772**	**$2,023**	**$2,276**	**$2,532**	**$2,793**	**$3,065**	**$3,336**	**$3,611**	**$3,877**	**$4,134**
Total liabilities and equity	**$7,510**	**$8,644**	**$(4,487)**	**-**	**$(2,784)**	**$8,883**	**$8,429**	**$8,343**	**$8,242**	**$8,125**	**$7,993**	**$7,848**	**$8,029**	**$8,304**	**$8,570**	**$8,827**
Balance check	0	(2,426)	2,424	(39)	41	-	-	-	-	-	-	-	(0.0)	(0.0)	0.0	0.0

Balance sheet assumptions

	Opening 2017	Pro forma 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Current assets												
Days Sales outstanding (DSO)	48.4	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0	43.0
Days Inventory Held (DIH)	76.2	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1
Prepaid and other current assets (in % of sales)	2.0%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Current liabilities												
Days payable outstanding (DPO)	77.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7	51.7
Accrued liabilities (% of sales)	9.2%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%	5.3%
Other current liabilities (% of sales)	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

3.3.3.Cash flow statement

The cash flow statement sums up the ongoing changes in the balance sheet and connects them with the income statement. Further are the capital expenditures and repayment of debt factored in.

($ in millions, fiscal year ending January 28)

Cash flow statement	Projection period									
	Year 1 2018	**Year 2 2019**	**Year 3 2020**	**Year 4 2021**	**Year 5 2022**	**Year 6 2023**	**Year 7 2024**	**Year 8 2025**	**Year 9 2026**	**Year 10 2027**
Operating activities										
Net income	$232	$251	$253	$256	$261	$271	$271	$275	$266	$257
Plus: Depreciation	60	76	91	107	122	138	153	169	184	200
Plus: Amortization	146	146	146	146	146	146	146	146	146	146
Plus: Amortization of financing fees	43	19	19	19	19	16	16	-	-	-
Change in working capital items										
(inc.) / dec in Account receivables	-	-	-	-	-	-	-	-	-	-
(inc.) / dec in Inventories	-	-	-	-	-	-	-	-	-	-
(inc.) / dec in Prepaid and other current assets	-	-	-	-	-	-	-	-	-	-
inc. / (dec) in Account payables	-	-	-	-	-	-	-	-	-	-
inc. / (dec) in Accrued liabilities	-	-	-	-	-	-	-	-	-	-
inc. / (dec) in Other current liabilities	-	-	-	-	-	-	-	-	-	-
(inc.) / dec in Net working capital	-	-	-	-	-	-	-	-	-	-
Cash flow from operating activities	**$482**	**$492**	**$509**	**$528**	**$549**	**$571**	**$587**	**$590**	**$596**	**$603**
Investing activities										
Capital expenditures	$(155)	$(155)	$(155)	$(155)	$(155)	$(155)	$(155)	$(155)	$(155)	$(155)
Other investing activities	-	-	-	-	-	-	-	-	-	-
Cash flow from investing activities	**$(155)**	**$(155)**	**$(155)**	**$(155)**	**$(155)**	**$(155)**	**$(155)**	**$(155)**	**$(155)**	**$(155)**
Financing activities										
Revolving credit facility	$(250)	-	-	-	-	-	-	-	-	-
Term loan A	(437)	(337)	(354)	(373)	(393)	(416)	(90)	-	-	-
Senior notes	-	-	-	-	-	-	-	-	-	-
Other debt										
Dividends										
Equity issuance / (Repurchase)										
Cash flow from financing activities	**$(687)**	**$(337)**	**$(354)**	**$(373)**	**$(393)**	**$(416)**	**$(90)**	**0**	**0**	**0**
Excess cash for the period	$(360)	-	-	-	-	-	$341	$434	$441	$448
Beginning cash balance	360	-	-	-	-	-	(0)	341	776	1,217
Ending cash balance	**-**	**-**	**-**	**-**	**-**	**-**	**$341**	**$776**	**$1,217**	**$1,664**
Cash flow statement assumptions										
Capital expenditures (% of sales)	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%	1.54%

3.3.4.Financial structure

The financial structure table represent the options of having different financial structures available, but as the financial structure has been pre-defined there is no reason to account for this. The financial structure is based on the principal debt, various fees and the purchase price described in attach table. The fair value of Staple´s equity awards pertaining to post-merger service is extracted from the 8-k form together with the fully diluted shares outstanding. The total debt represents the book value of the existing debt, the redemption on the debt has been describe earlier and the cash and cash equivalent equal the amount of cash used to pay down the existing debt. This does not account for all the outstanding cash. The remaining cash will be allocated to the B2B unit. The financing fees, amortization of financing fees and the financial structure are represented in appendix 11.

3.3.5.Debt schedule

The debt schedule describes the forward LIBOR curve on a monthly yearly average, which has been extracted from Pensford Financial Group. Below the average standard deviation is depicted. The cash flow numbers are extracted from the cash flow statement and after the mandatory repayment, together with the addition of cash from the balance sheet, is the cash available for optional debt represented. It is assumed that the first priority is to repay the revolving credit facility followed by the term facility. The interest rates, except for the senior note, is based on the LIBOR added a fixed spread. It is assumed that the senior note is ongoing beyond its term through a re-installment of the senior note after its terms. The debt schedule is found in appendix 12.

3.3.6.PPE schedule

This schedule which is connected to the balance sheet, represent the calculation of depreciation and PPE development. A straight-line depreciation is assumed for both existing PPE and newly added PPE represented by CAPEX. The depreciation comprises of two components depreciation on existing PPE based on a 20-year period and newly added CAPEX based on a 10-year period. These periods are based on information from the annual report 2016. The PPE schedule is found in appendix 13.

3.3.7.Return analysis

The return analysis describes the return on the LBO based on the initial equity investment, Exit EBITDA multiple, and projected EBITDA. The entry multiple is based on the LTM EBTIDA of $1,047.7 Million and the enterprise value of $6,617.9 million and giving that this scenario is the base scenario, is the EXIT multiple unchanged. This EXIT multiple will be altered in the other scenarios. The proceeds from the carve-out is factored into the equity value to establish a total return on the investment. Under is the both the cash return and IRR calculated for each projected year.

($ in millions, fiscal year ending January 28)

Returns analysis												
Scenario 1). Base			**Projection period**									
		Pro forma 2017	**Year 1 2018**	**Year 2 2019**	**Year 3 2020**	**Year 4 2021**	**Year 5 2022**	**Year 6 2023**	**Year 7 2024**	**Year 8 2025**	**Year 9 2026**	**Year 10 2027**
Entry EBITDA multiple	**6.3x**											
Initial equity investment		$1,612										
EBITDA			$840	$840	$840	$840	$840	$840	$840	$840	$840	$840
Exit EBITDA multiple	**6.3x**											
Enterprise value at exit			**$5,292**	**$5,292**	**$5,292**	**$5,292**	**$5,292**	**$5,292**	**$5,292**	**$5,292**	**$5,292**	**$5,292**
Less: Net debt												
ABL revolving credit facility			-	-	-	-	-	-	-	-	-	-
Senior secured term loan facility			1,963	1,627	1,273	900	507	90	-	-	-	-
Senior notes			1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600
Total debt			**$3,563**	**$3,227**	**$2,873**	**$2,500**	**$2,107**	**$1,690**	**$1,600**	**$1,600**	**$1,600**	**$1,600**
Less: Cash and cash equivalents			-	-	-	-	-	(0)	341	776	1,217	1,664
Net debt			**$3,563**	**$3,227**	**$2,873**	**$2,500**	**$2,107**	**$1,690**	**$1,259**	**$824**	**$383**	**$(64)**
Proceeds from the carveout transaction			$1,350	$1,350	$1,350	$1,350	$1,350	$1,350	$1,350	$1,350	$1,350	$1,350
Equity value at exit			**$3,079**	**$3,415**	**$3,769**	**$4,142**	**$4,535**	**$4,952**	**$5,383**	**$5,818**	**$6,259**	**$6,706**
Cash return			**1.9x**	**2.1x**	**2.3x**	**2.6x**	**2.8x**	**3.1x**	**3.3x**	**3.6x**	**3.9x**	**4.2x**

	Year 1 2018	**Year 2 2019**	**Year 3 2020**	**Year 4 2021**	**Year 5 2022**	**Year 6 2023**	**Year 7 2024**	**Year 8 2025**	**Year 9 2026**	**Year 10 2027**
Initial equity investment	$(1,612)	$(1,612)	$(1,612)	$(1,612)	$(1,612)	$(1,612)	$(1,612)	$(1,612)	$(1,612)	$(1,612)
Equity proceeds	$3,079	-	-	-	-	-	-	-	-	-
		$3,415	-	-	-	-	-	-	-	-
			$3,769	-	-	-	-	-	-	-
				$4,142	-	-	-	-	-	-
					$4,535	-	-	-	-	-
						$4,952	-	-	-	-
							$5,383	-	-	-
								$5,818	-	-
									$6,259	-
										$6,706
IRR	**91.0%**	**45.6%**	**32.7%**	**26.6%**	**23.0%**	**20.6%**	**18.8%**	**17.4%**	**16.3%**	**15.3%**

3.3.8.Transaction summary

STAPLES inc.

Leverage buyout analysis

($ in millions, fiscal year ending January 28)

Transaction Summary

Sources of Funds

	Amount	% of Total Sources	Multiple of EBITDA 4/29/2017	Multiple of EBITDA Cumulative	Pricing
ABL revolving credit facility	$250.0	3.1%	0.2x	0.2x	L+300bps
Senior secured term loan facility	$2,400.0	29.7%	2.3x	2.5x	L+300bps
Term loan B	0.0	0.0%	0.0x	2.5x	NA
Term loan C	0.0	0.0%	0.0x	2.5x	NA
2nd Lien	0.0	0.0%	0.0x	2.5x	NA
Senior notes	$1,600.0	19.8%	1.5x	4.1x	7.36%
Senior subordinated notes	0.0	0.0%	0.0x	4.1x	NA
Equity contribution	$1,611.9	20.0%	1.5x	5.6x	
Proceeds from the carveout transaction	$1,350.0	16.7%	1.3x	6.9x	
Cash on hand	$860.0	10.7%	0.8x	7.7x	
Total sources	**$8,071.9**	**100.0%**	**7.7x**	**7.7x**	

Uses of Funds

	Amount	% of Total Sources
Purchase Staples inc. Equity	$6,765.9	83.8%
Repay existing debt	$1,008.0	12.5%
Tender / Call premium	0.0	0.0%
Financial Fees	$153.0	1.9%
Other Fees and Expenses	$145.0	1.8%
		0.0%
		0.0%
		0.0%
Total uses	**$8,071.9**	**100.0%**

Purchase price

Offer price per share	$10.25
Fully diluted shares outstanding	667.7
Equity purchase price	**$6,765.9**
Plus: Existing net debt	(148.0)
Enterprise Value	**$6,617.9**

Transaction multiples

Enterprise Value / Sales		
LTM	$17,085.0	0.4x
2018E	$10,114.0	0.7x
Enterprise Value/ EBITDA		
LTM	$1,047.7	6.5x
2018E	$840.0	8.1x

Return analysis

Exit Year	2024
Entry Multiple	6.32x
Exit Multiple	6.30x
IRR	**18.8%**
Cash return	**3.34x**

Options

Financing structure	1
Operating Scenario	1
Cash flow sweep	1
Cash balance	1
Average interest	1
Carveout	1

Summary Financial Data

	Historical period 2014	2015	2016	LTM 4/29/2017	Proforma 2017	Projection period Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027
Sales	**$19,684.0**	**$18,764.0**	**$18,247.0**	**$17,085.0**	**$10,114.0**	**$10,114.0**	**$10,114.0**	**$10,114.0**	**$10,114.0**	**$10,114.0**	**$10,114.0**	**$10,114.0**	**$10,114.0**	**$10,114.0**	**$10,114.0**
%,growth	n/a	(4.7%)	(2.8%)	n/a	(44.6%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Gross profit	**$5,039.0**	**$4,917.0**	**$4,756.0**	**$4,561.0**	**$2,341.0**	**$2,341.0**	**$2,341.0**	**$2,341.0**	**$2,341.0**	**$2,341.0**	**$2,341.0**	**$2,341.0**	**$2,341.0**	**$2,341.0**	**$2,341.0**
%, margin	25.6%	26.2%	26.1%	26.7%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%
Capital expenditures	136.4	114	144	152.3	155.3	155.3	155.3	155.3	155.3	155.3	155.3	155.3	155.3	155.3	155.3
%,sales	0.7%	0.6%	0.8%	0.9%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Cash interest expense					248.5	243.5	224.5	206.5	185.3	163.0	134.9	120.3	117.7	117.7	117.7
Total interest expense					291.7	286.8	243.8	225.8	204.6	182.3	151.2	136.6	117.7	117.7	117.7
Free cash flow															
EBITDA					$745.6	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0	$840.0
Less: Cash interest expense					(248.5)	(243.5)	(224.5)	(206.5)	(185.3)	(163.0)	(134.9)	(120.3)	(117.7)	(117.7)	(117.7)
Plus: Interest income					0.0	0.0	0.0	0.0	0.0	0.0	0.0	$0.9	$2.8	$5.0	$7.2
Less: Income taxes					0.0	(114.5)	(123.6)	(124.4)	(126.3)	(128.5)	(133.6)	(133.6)	(135.4)	(131.0)	(126.6)
Less: Capital expenditures					(155.3)	(155.3)	(155.3)	(155.3)	(155.3)	(155.3)	(155.3)	(155.3)	(155.3)	(155.3)	(155.3)
Less: Increase in net working capital					0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Free cash flow					**$341.9**	**$326.7**	**$336.6**	**$353.8**	**$373.1**	**$393.2**	**$416.1**	**$431.6**	**$434.4**	**$441.0**	**$447.6**
Cumulative free cash flow					341.9	326.7	663.3	1,017.1	1,390.2	1,783.4	2,199.5	2,631.2	3,065.6	3,506.6	3,954.3

Capitalization

	Proforma 2017	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027
Cash and cash equivalents	(360.0)	0.0	0.0	0.0	0.0	0.0	0.0	(341.2)	(775.6)	(1,216.6)	(1,664.3)
ABL revolving credit facility	250.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senior secured term loan facility	2,400.0	1,963.3	1,626.7	1,272.9	899.8	506.6	90.5	0.0	0.0	0.0	0.0
Total senior secured debt	**$2,290.0**	**$1,963.3**	**$1,626.7**	**$1,272.9**	**$899.8**	**$506.6**	**$90.5**	**$(341.2)**	**$(775.6)**	**$(1,216.6)**	**$(1,664.3)**
Senior notes	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0
Total senior debt	**$3,890.0**	**$3,563.3**	**$3,226.7**	**$2,872.9**	**$2,499.8**	**$2,106.6**	**$1,690.5**	**$1,258.8**	**$824.4**	**$383.4**	**$(64.3)**
Senior subordinated notes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total debt	**$3,890.0**	**$3,563.3**	**$3,226.7**	**$2,872.9**	**$2,499.8**	**$2,106.6**	**$1,690.5**	**$1,258.8**	**$824.4**	**$383.4**	**$(64.3)**
Shareholder equity	1,540.0	1,772.5	2,023.4	2,276.0	2,532.3	2,793.3	3,064.6	3,335.9	3,610.7	3,876.6	4,133.6
Total capitalization	**$5,430.0**	**$5,335.8**	**$5,250.1**	**$5,148.9**	**$5,032.2**	**$4,899.9**	**$4,755.1**	**$4,594.7**	**$4,435.1**	**$4,260.0**	**$4,069.4**
% of bank debt repaid	91.5%	83.8%	75.9%	67.6%	58.8%	49.6%	39.8%	29.6%	19.4%	9.0%	(1.5%)

Credit statistics

	Proforma 2017	Year 1 2018	Year 2 2019	Year 3 2020	Year 4 2021	Year 5 2022	Year 6 2023	Year 7 2024	Year 8 2025	Year 9 2026	Year 10 2027
% Debt / Total capitalization	*71.6%*	*66.8%*	*61.5%*	*55.8%*	*49.7%*	*43.0%*	*35.6%*	*27.4%*	*18.6%*	*9.0%*	*(1.6%)*
EBITDA / Cash interest expense	3.0x	3.4x	3.7x	4.1x	4.5x	5.2x	6.2x	7.0x	7.1x	7.1x	7.1x
(EBITDA - CAPEX) / Cash interest expense	2.4x	2.8x	3.0x	3.3x	3.7x	4.2x	5.1x	5.7x	5.8x	5.8x	5.8x
EBITDA / Total interest expense	2.6x	2.9x	3.4x	3.7x	4.1x	4.6x	5.6x	6.1x	7.1x	7.1x	7.1x
(EBITDA - CAPEX) / Total interest expense	2.0x	2.4x	2.8x	3.0x	3.3x	3.8x	4.5x	5.0x	5.8x	5.8x	5.8x
Senior secured debt / EBITDA	3.1x	2.3x	1.9x	1.5x	1.1x	0.6x	0.1x	-0.4x	-0.9x	-1.4x	-2.0x
Senior debt / EBITDA	5.2x	4.2x	3.8x	3.4x	3.0x	2.5x	2.0x	1.5x	1.0x	0.5x	-0.1x
Total debt / EBITDA	5.2x	4.2x	3.8x	3.4x	3.0x	2.5x	2.0x	1.5x	1.0x	0.5x	-0.1x
Net Debt / EBITDA	5.7x	4.2x	3.8x	3.4x	3.0x	2.5x	2.0x	1.9x	1.9x	1.9x	1.9x

3.4.LBO analysis

The two previous valuation have both been applied to a consolidated Staples and post-carve-out. This pose a problem for the LBO analysis. This LBO analysis will make a valuation of the B2B unit which is carve-out. To account for the whole transaction of Staples, are the proceeds from the carve-out representing the potentially sell-off of the B2C unit, taken into consideration. These proceeds will work as a proxy value of the B2C unit. This is not ideal but given the scope of this thesis is this required.

As discussed earlier there are different exit strategies for a sponsor to exit the LBO. Given the limited information about Sycamore´s investment strategies and exit methods this aspect is not taken into account. It is assumed that Staples will be sold to a strategic buyer or sponsor through a traditional M&A transaction. This assumption includes the likelihood of a higher premium on the sales price as the strategic buyer expects to realize certain synergies (Rosenbaum 2009).

The LBO model projects a ten-year period. As most sponsors aim to exit within a five-year holding period, the prospect of Sycamore holding on to the investment for the entire projected period is unlikely (Rosenbaum 2009). Further, the definitive proxy statements disclose information regarding both Barclays' and Morgan Stanley's calculations of a leveraged buyout analysis in which the exit is assumed to be at the end of 2021, a four-year period. This exit strategy is, however, based on a non-carve-out Staples. Given Staples´ historical financial struggle and prospect of managing a carve-out of the entire company is it assumed that Sycamore intends to exit around 2024, a seven-year period. This also corresponds to the term of most of the acquired debt and therefore presents a less leverage position. The exit years examined will be from 2024-2027, with focus on 2024 and 2025.

The exit multiple is expected to increase giving the carve-out action, representing a financial arbitrage through a corporate refocusing. In the publication by Morgan Stanley in 2011 researching the conglomerate discount effect was it found that parent companies increase their valuation multiple, firm value-to-EBITDA after a spin-off by 0.3x on a global level in period 2001-2010 (Khorana et al.). This shows that there are empirical arguments for achieving a multiple expansion upon exit as a result from a carve-out. Staples is however not a conglomerate but given the level of struggle the B2C segment has experience and the prospected of only increasing competition in that segment, is there reason for believing in an expansion in the exit multiple. This is further supported by, that Staples will undergo significant changes in their operational mindset potentially shift from a retail business to a distribution business, as a result of the carve-out. The leverage buyout valuation in the definitive proxy statement uses a 4.5x to 6.5x firm value-to-EBITDA, given that he entry EBITDA multiple was 6.3x, is the range deemed too low. The application of the same range used in the transaction does however increase the level of comparableness but at the same time increase a bias towards getting same results as the financial advisors. Further is the range very similar to the applied multiple range used in the comparable analysis.

The implied share price is produced in similar way as with the comparable and precedent valuation, with the only difference of having the proceeds from the carve-out added to the enterprise value. The implied share price for the base scenario given the same exit multiple range as the proxy statement is given below together with the internal rate of return, (IRR), produced in the return analysis. The IRR is a common return metric used in a LBOs and measures the total return on the equity investment. A rule of thumb is having a threshold of 20% required return in terms of an IRR (Rosenbaum 2009). The IRR represents the interest rate that sets the NPV for an investment equal to zero. An IRR of 20% is another way of saying, that the investment earnings you 20% per period over the investment horizon (Berk & DeMarzo,2014). In an LBO setting is this metric fitting as one usually has an upfront payment, in terms of equity investment, and a single payoff after the

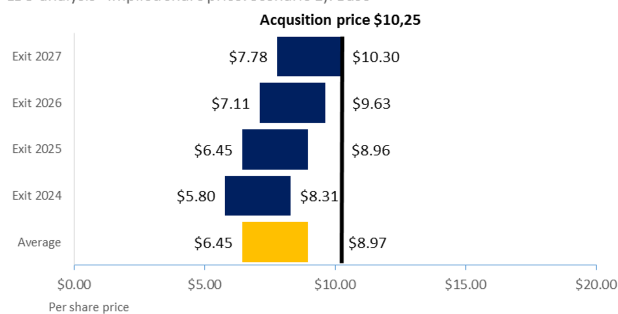
holding period. Applying IRR helps assess the return on the investment taking the length of the holding period into account.

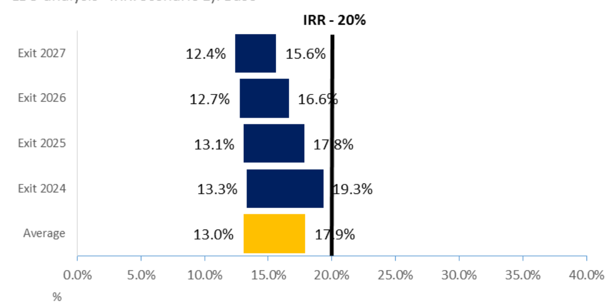
3.4.1.Scenario 1). Base Exit multiple (4.5x – 6.5x)

The first applied exit multiples will be based on the multiples used in the proxy statement.

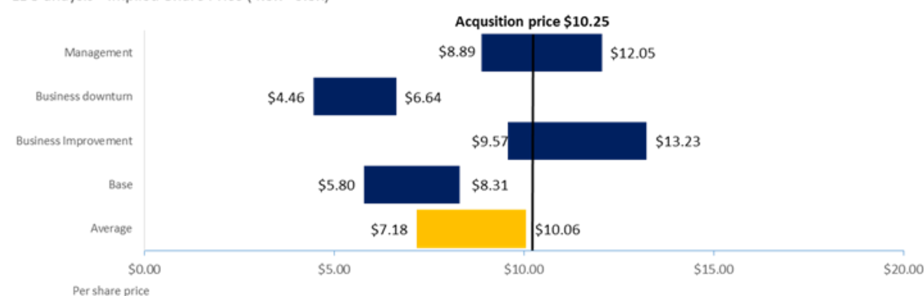
Staples Inc.
Implied Valuation Range - LBO analysis
Scenario 1). Base
($ in millions)

Exit Year	Financial Metric	Exit Multiple Range	Proceeds from the carveout	Implied Enterprise value	Less: Net Debt	Implied Equity value	Fully Diluted Shares	Implied Share Prices	IRR
Exit 2024	$840	4.5x - 6.5x	$1,350.0	$5,130 - $6,810	$(1,258.8)	$3,871 - $5,551	667.7	$5.80 - $8.31	13.3% - 19.3%
Exit 2025	$840	4.5x - 6.5x	$1,350.0	$5,130 - $6,810	$(824.4)	$4,306 - $5,986	667.7	$6.45 - $8.96	13.1% - 17.8%
Exit 2026	$840	4.5x - 6.5x	$1,350.0	$5,130 - $6,810	$(383.4)	$4,747 - $6,427	667.7	$7.11 - $9.63	12.7% - 16.6%
Exit 2027	$840	4.5x - 6.5x	$1,350.0	$5,130 - $6,810	$64.3	$5,194 - $6,874	667.7	$7.78 - $10.30	12.4% - 15.6%

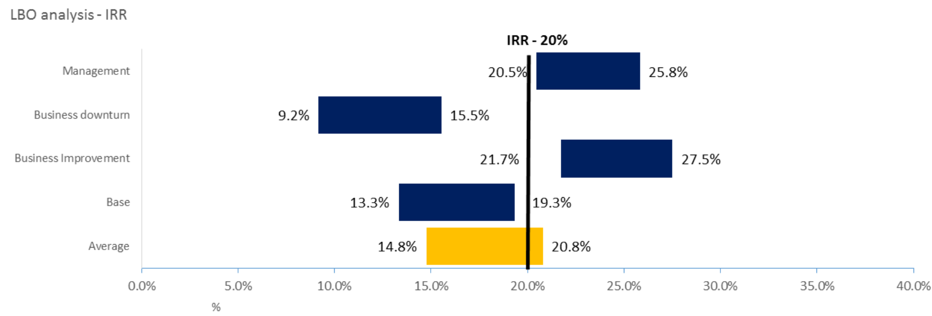




This table and the two figures show the base representing a status quo. The average of the implied share prices is below the acquisition price, and the average IRR is below the hurdle rate of 20%. Assuming an exit year of 2024 and applying the same exit multiple range to the other scenarios, gives the following result in terms of implied share prices.



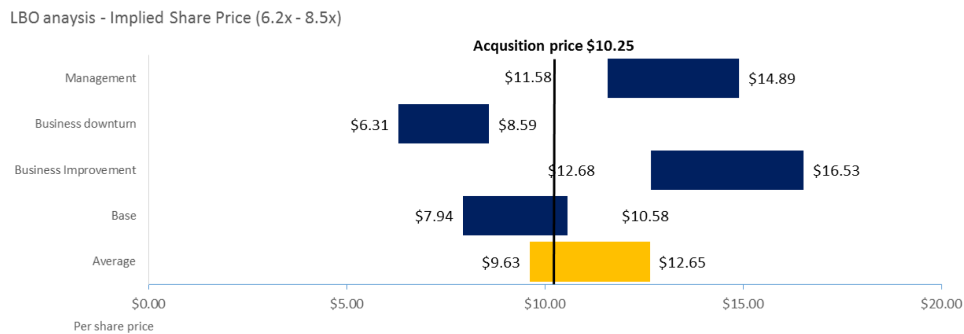
The result shows an average below the acquisition price but with both the business improvement and management scenario having the price within their implied share price ranges. In terms of the IRR does the range gives the following IRR.



The average range is just above the 20%, but both the business improvement and management scenario is beyond the hurdle rate. With the same exit multiple applied as in the proxy statement, is the average implied shared price below the acquisition price, implying an overvalue price. Further, does the IRR barely include the hurdle rate of 20% in the average range. As it has been previously discussed is the multiple range of 4.5x to 6.5x deemed low compared to the entry multiple of 6.3x. Other exit multiple ranges are required as a result.

3.4.2.Precedent valuation exit multiples

Had the multiple range been similar to that of the precedent analysis, representing a multiple range based on precedent transactions in the retail industry by financial sponsors, would the average include the acquisition price. This does however make the management scenario considerably higher in terms of implied share price, but at the same includes the base scenarios, which is unlikely as it represents a status quo scenario.



Earlier was it assumed that the potential buyer would be a strategic buyer, which will increase the multiple range even more, especially given that the median for precedent transaction for strategic buyers in the retail industry had a median of 9.9x in the precedent analysis. But a multiple expansion from 6.3x to 9.9x is highly unlikely as the conglomerate discount effect only resulted in a 0.3x multiple expansion

3.4.3.IRR hurdle rage of 20%

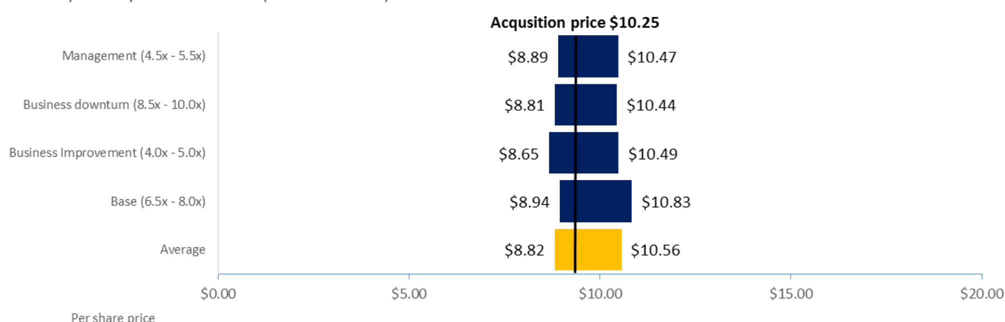
Another way of addressing whether of the acquisition price of $10.25 is deemed appropriate is to determine what exit multiple range would produce an IRR above 20% given each scenario and determine each scenarios range of implied share prices. Assuming an exit in 2024, will the use of sensitivity analyses for difference exit multiples, provided in the appendix, help establishing exit multiple ranges. For instance, does and exit multiple of 7.0x produce an IRR of 20.6% in 2024 in the base scenario. Given an 20% IRR hurdle rate will the exit multiple range start at 6.5x and limit itself to 8.5x. This is further done for each scenario, determining the lower limit of the exit multiple range based on a hurdle rate of 20% IRR. The business improvement and

management scenario will be given lower ranges as the financial metric is larger, producing a larger range of implied share price.

Staples Inc.
Implied Valuation Range - LBO analysis (20% IRR hurlde rate)
($ in millions)

Scenarios: Exit year 2024	Financial Metric	Exit Multiple Range			Proceeds from the carveout	Implied Enterprise value			Less: Net Debt	Implied Equity value			Fully Diluted Shares	Implied Share Prices		
Base	$840	7.0x	-	8.5x	$1,350.0	$7,230	-	$8,490	$(1,258.8)	$5,971	-	$7,231	667.7	$8.94	-	$10.83
Business Improvement	$1,222	4.0x	-	5.0x	$1,350.0	$6,240	-	$7,462	$(461.1)	$5,779	-	$7,001	667.7	$8.65	-	$10.49
Business downturn	$725	8.5x	-	10.0x	$1,350.0	$7,513	-	$8,600	$(1,631.6)	$5,881	-	$6,969	667.7	$8.81	-	$10.44
Management	$1,054	4.5x	-	5.5x	$1,350.0	$6,095	-	$7,149	$(157.0)	$5,938	-	$6,992	667.7	$8.89	-	$10.47
Average		6.00x		7.25x												

LBO anaysis - Implied Share Price (20% IRR hurdle)



The average exit multiple range represent the average exit multiple lower limit and upper limit. Given that the average includes the entry multiple of 6.3x gives insurance of an appropriate multiple range. The appropriate multiple range is thus 5.9x to 7.1x, representing an average exit multiple range which is based on an 20% IRR hurdle rate.

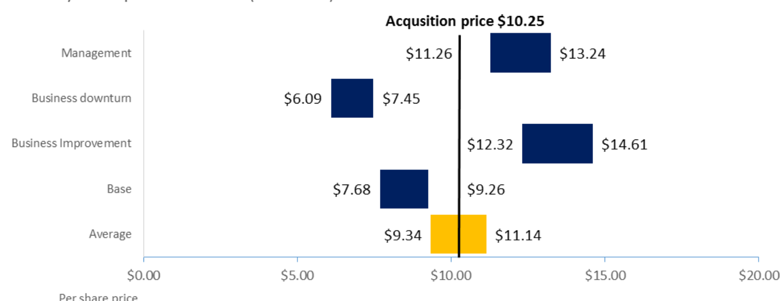
3.4.4. Exit multiple range of (6.0x to 7.3x)

Applying this range gives the following results.

Staples Inc.
Implied Valuation Range - LBO analysis
($ in millions)

Scenarios: Exit year 2024	Financial Metric	Exit Multiple Range			Proceeds from the carveout	Implied Enterprise value			Less: Net Debt	Implied Equity value			Fully Diluted Shares	Implied Share Prices		
Base	$840	6.0x	-	7.3x	$1,350.0	$6,390	-	$7,440	$(1,258.8)	$5,131	-	$6,181	667.7	$7.68	-	$9.26
Business Improvement	$1,222	6.0x	-	7.3x	$1,350.0	$8,685	-	$10,213	$(461.1)	$8,224	-	$9,752	667.7	$12.32	-	$14.61
Business downturn	$725	6.0x	-	7.3x	$1,350.0	$5,700	-	$6,607	$(1,631.6)	$4,069	-	$4,975	667.7	$6.09	-	$7.45
Management	$1,054	6.0x	-	7.3x	$1,350.0	$7,677	-	$8,995	$(157.0)	$7,520	-	$8,838	667.7	$11.26	-	$13.24

LBO anaysis - Implied Share Price (6.0x - 7.3x)



The average of the implied share price shows an average containing the acquisition price. While the lower limit of the average IRR is 19.1%, slightly below the hurdle rate. The median implied share price is $10.26 an 0.1% increase compared to the acquisition price. If only the scenarios of business improvement and management is taken into account, assuming a higher probability of their occurrence, would result in a median price of $12.78 an increase of 24.6%. This exit multiple range provide a good assessment of the acquisition as it is based on exit multiples that produces only IRR above 20%. Having the median so close to the acquisition price indicates, based on the LBO analysis and model, that the price is very appropriate taken several scenarios into account and assuming a hurdle rate of 20% IRR.

3.4.5.Overall assessment

As the entry multiple was 6.3x the applied exit multiple used in the proxy statement was deemed too low. Further was this range based on the consolidated Staples and not the carve-out version, thus was the potentially benefit of the conglomerate effect not taken into account. Using the precedent multiple range resulted in a high implied share prices and would assume a multiple expansion from 6.3x to potentially 8.5x which is very unlikely. The solution was to produce an exit multiple range that was based on a hurdle rate of 20% IRR. The produced exit multiple range included the entry multiple further supporting its relevance. The median of the implied share price was $10.26 strongly indicating that the acquisition price of $10.25 is a very appropriate estimate of Staples value at the time of the acquisition.

3.4.6.Sensitivity analysis

If the range of exit multiples of 6.0x to 7.3x is applied for each scenario over the projection period, can the exit year of which the acquisition price is deemed most appropriate be found. In the base scenario is the only two exit year yielding a share price around the acquisition price 2026 and 2027. The business improvement scenarios have exit year of 2021 and 2022, while the business downturn has no appropriate exit year. The management scenario has both 2022 and 2023. The exit in-between these exit years is 2024, supporting the assumption of an exit in 2024.

The IRR based on acquisition price and exit multiple helps understand how the exit multiple range of 6.0x and 7.3x was produced.

The sensitivity tables of IRR based on exit year and exit multiples shows the IRR based on these two variables. This sensitivity analysis shows that the closer the exit year comes to 2018 the higher the IRR gets. This is because of IRR represents a return metric based on number of periods. By reducing the number of periods will it increase the IRR. Having an exit year assumption of 2024 and an IRR hurdle of 20% is thus a relative big demand of an investment given the exit year of 2024 represents a seven term period. This is equivalent to require an average return of 20% each year on the investment.

Appendices 14 through 16 provide sensitivity analyses of implied share prices based on exit multiples and exit year, IRR based on the acquisition price and exit multiple assuming an exit in 2024, as well as of IRR based on the exit year and exit multiple.

3.5.APV analysis

Having applied a LBO analysis on the transaction has provided necessary and useful information, to evaluate the acquisition price. But to get the full picture of Sycamores´ acquisition of Staples is a DCF analysis also required, providing further depth to the analysis. This include a cash-flow-based valuation that is adjusted for the time value of money unlike the LBO which make use of multiples. A LBO does however pose, the problem of a non-constant capital structure making the application of WACC theoretical in-correct. The solution to this problem is the adjusted present value method (APV). The APV is an alternative valuation method which divided the levered value of a company into an unlevered value part and an interest tax shield value. This approach is beneficial as it provides a valuation method without the application of the WACC and the accompanied assumptions (Berk & DeMarzo,2014).

The first step is to determine the unlevered cost of capital. As it is unlevered, does it not take the cost of debt into account, making the unlevered cost of capital equal to the unlevered cost of equity. The unlevered cost of equity can be estimated using the capital asset pricing model, CAPM. The CAPM comprises of three components the risk-free rate, market risk premium and the beta. The risk-free rate is provided by NYU stern database, which provide the geometric average of the return on a 10-year t-bond in the period from 2008-2017 representing the risk-free rate of 3.97%. The market risk premium is based on a KPMG report providing historical market risk premiums. The market risk premium of the first quarter of 2017 was 5.75%, and is used, as the pro-forma statements was based on 2017 first quarter numbers (Equity Market Risk Premium – Research Summary, KPMG Advisory, 2018). The beta in the CAPM needs to the unlevered beta to represent the unlevered cost of capital. The unlevered beta is based on the extrapolated beta from the closest comparables, established in the Comparable analysis. These companies are all the companies in tier 1, the retail companies.

Comparable Companies Unlevered Beta				
Company	Levered Beta	Debt/ Equity	Marginal Tax Rate	Unlevered Beta
Best Buy Co., Inc.	0.97	28.1%	33.5%	0.82
Dick's Sporting Goods, Inc.	0.39	0.0%	37.3%	0.39
Bed, Bath and Beyond Inc.	0.98	54.9%	35.7%	0.72
Office Depot, Inc.	2.57	62.4%	(47.9%)	1.34
GameStop Corp.	1.42	36.2%	30.0%	1.13
Barnes & Noble, Inc.	1.04	11.3%	52.9%	0.99
Mean	**1.23**	**32.1%**	**23.6%**	**0.90**
Median	**1.01**	**32.1%**	**34.6%**	**0.90**

The levered beta for each company are unlevered by this formula: $Unlevered\ beta = \frac{Levered\ beta}{1+\left(\frac{Debt}{Equity}\right)*(1-t)}$, adjusting the unlevered beta for both leverage ratio and tax (Rosenbaum 2009). The median of the unlevered beta will be the used beta for the unlevered cost of capital. Resulting in a cost of capital of 9.2%.

The second step is to determine the unlevered value. This is done by first discounting the free cash flow extracted from the LBO model, with the unlevered cost of capital. The second step is to determine the terminal value of the unlevered value. To have a clear connection to the LBO analysis and make both analysis comparable, will the terminal value be based on exit multiples rather than a discount factor. This also helps as it doesn't require any assumptions regarding the perpetuity growth rate. The implied perpetuity growth rate will be estimates based on the calculated WACC later. The unlevered value is thus produced by applying an exit multiple on an EBITDA for that particular period, which is also extracted from the LBO model. The discounting for the FCF is further converted to mid-year convention assuming the FCF is received evenly throughout the year. The discounting of the terminal value based on exit multiple, is however based on a year-end discounting, as it is based on EBTIDA which is a full calendar year metric (Rosenbaum 2009).

The unlevered value is thus calculated based on the formula below.

$$Unlevered\ value = \sum_{t=1}^{n} \frac{FCF_t}{(1+R_u)^{t-0.5}} + \frac{FCF_t}{(1+R_u)^{n-0.5}} + \frac{EBITDA_t * Exit\ Multiple}{(1+R_u)^n}$$

The third step is to determine the unlevered present value of the interest tax shield, ITH. The ITH represent the benefit of the tax reduction as a result from interest expenses. Applying leverage to a firm will, thus result in an increase in the cash flow to investors because of the ITH. The total cash flow to investors of a leverage firm can be divided into a cash flow to investors without leverage and the ITH. By the law for one price must the PV of both the unleveraged cash flow and ITH be equal to the leverage cash flow (Berk & DeMarzo,2014). The ITH is calculated by multiplying the tax rate on the total interest paid, which are both extracted from the LBO model. The cash flow from the ITH is then discounted with the cost of debt, which will be described later. If the debt-to-equity had been predetermined and hold constant would the ITH share same risk as the FCF, making the application of unlevered cost of capital more appropriate (Berk & DeMarzo,2014). Since this is not the case is the cost of debt used, which will be detailed later. The terminal value of the ITH is calculated with the perpetuity growth method using the implied perpetuity growth calculated in the second step and the cost of debt. This terminal value is discounted using a mid-year convention, since it is not based on a full calendar year metric, with the use of cost of debt. The ITH value is thus calculated based on the formula below.

$$ITH\ value = \sum_{t=1}^{n} \frac{ITH_t}{(1+R_d)^{t-0.5}} + \frac{ITH_t}{(1+R_d)^{n-0.5}} + \frac{ITH_t * (1 + Imp.Perpetuity\ growth\ rate)}{(R_d - Imp.Perpetuity\ growth\ rate)} * (1+R_d)^{-(n-0,5)}$$

The fourth step is to adjust the proceeds from the carve-out. As the proceeds from the carve-out is included in the sources of funds, are the proceeds bound to the Staples investment and not acquired before an actual sell. The proceeds is treated as a single cash flow installment given the exit year. As the proceeds is not tied to the performance of neither the FCF and ITH, are the proceeds discounted by the risk-free rate. The proceeds of the carve-out value is thus calculated based on the formula below.

$$Proceeds\ from\ the\ carveout\ = \frac{Proceeds\ from\ the\ carveout}{\left(1+R_f\right)^{n-0.5}}$$

The final and fifth step is to determine the levered value and implied share price. The levered value is the unlevered value plus the ITH value and the value of the proceeds from the carve-out. The equity value at exit is calculated by subtracting the net debt extracted from the LBO model. The implied share price is then based on the fully diluted shares outstanding.

The calculation of both WACC and cost of debt is also required. The WACC is based on the levered cost of equity and cost of debt. The levered cost of equity is calculated based on the levered beta using the CAPM. The levered beta is calculated as:

$Levered\ beta = Unevered\ beta * 1 + \left(\frac{Debt}{Equity}\right) * (1-t).$

This levered beta is then used to the calculation of the levered equity value. To calculate the cost of debt is the beta of debt required, which is based on the total capitalization and both the unlevered beta and levered equity beta:

$Beta\ of\ Debt = \frac{Debt+Equity}{Debt} * Unevered\ beta - \frac{Equity}{Debt} * Levered\ beta$, (Berk & DeMarzo,2014).

The cost of debt is then produced by using the CAPM. Having the cost of debt, cost of equity and capital structure available makes way for the calculation of the WACC.

The implied perpetuity growth rate is based on the WACC and terminal value from the exit multiple and as it is applied on a cash flow which has a mid-year convention will it also undergo an adjustment.

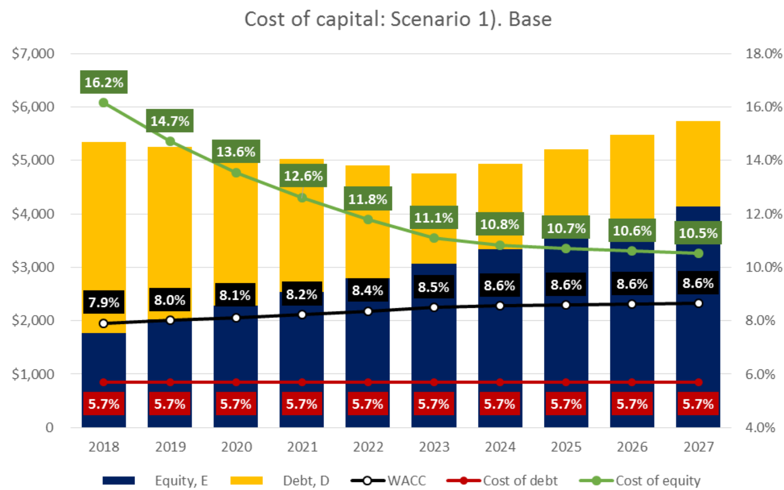
$$Implied\ perpetuity\ growth\ rate = \frac{(TV * WACC) - FCF_{TV} * (1 + WACC)^{0.5}}{TV + FCF_{TV} * (1 + WACC)^{0.5}}, TV = Terminal\ value$$

Below is a table of the complete calculations for each step. The table is based on the base scenario and an exit multiple of 6.3x similar to the entry multiple.

($ in millions, fiscal year ending January 28)

APV analysis										
Scenario 1). Base	**Projection period**									
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
	2018	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Discount period	**0.5**	**1.5**	**2.5**	**3.5**	**4.5**	**5.5**	**6.5**	**7.5**	**8.5**	**9.5**
Unlevered cost of captial 1)										
Unlevered beta	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Risk free rate	3.97%	3.97%	3.97%	3.97%	3.97%	3.97%	3.97%	3.97%	3.97%	3.97%
Market risk premium	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%
Unlevered, Return on capital	**9.2%**	**9.2%**	**9.2%**	**9.2%**	**9.2%**	**9.2%**	**9.2%**	**9.2%**	**9.2%**	**9.2%**
Unlevered value 2)										
Unlevered, Return on capital	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%
Free cash flow	$327	$337	$354	$373	$393	$416	$432	$434	$441	$448
PV, FCF	**$313**	**$295**	**$284**	**$275**	**$265**	**$257**	**$244**	**$225**	**$209**	**$195**
Commulative PV, FCF	**$313**	**$608**	**$892**	**$1,166**	**$1,431**	**$1,688**	**$1,932**	**$2,158**	**$2,367**	**$2,561**
EBITDA	$840	$840	$840	$840	$840	$840	$840	$840	$840	$840
Exit Multiple	6.30x	6.30x	6.30x	6.30x	6.30x	6.30x	6.30x	6.30x	6.30x	6.30x
Implied perpetuity growth rate	**1.4%**	**1.3%**	**1.1%**	**0.8%**	**0.6%**	**0.3%**	**0.1%**	**0.0%**	**(0.1%)**	**(0.2%)**
Terminal value, Unlevered value	$5,292	$5,292	$5,292	$5,292	$5,292	$5,292	$5,292	$5,292	$5,292	$5,292
PV, Terminal value, Unlevered value	**$4,848**	**$4,441**	**$4,068**	**$3,726**	**$3,414**	**$3,127**	**$2,865**	**$2,624**	**$2,404**	**$2,202**
Unlevered value	**$5,160**	**$5,049**	**$4,960**	**$4,893**	**$4,845**	**$4,815**	**$4,797**	**$4,782**	**$4,771**	**$4,763**
Interest tax shield 3)										
Interest paid	$292	$287	$244	$226	$205	$182	$151	$137	$118	$118
Tax rate	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*	*33%*
Total tax shield, T_s	$96	$95	$80	$75	$68	$60	$50	$45	$39	$39
PV tax shield	**$94**	**$87**	**$70**	**$61**	**$53**	**$44**	**$35**	**$30**	**$24**	**$23**
Terminal value, Tax shield	$2,282	$2,192	$1,769	$1,548	$1,329	$1,116	$886	$797	$675	$663
PV, Terminal value, Tax shield	**$2,220**	**$2,018**	**$1,540**	**$1,276**	**$1,036**	**$823**	**$619**	**$526**	**$422**	**$392**
Tax shield value	**$2,313**	**$2,199**	**$1,791**	**$1,588**	**$1,401**	**$1,233**	**$1,063**	**$1,000**	**$920**	**$913**
Proceeds from the carveout transaction 4)										
Proceeds from the carveout transaction	$1,350	$1,350	$1,350	$1,350	$1,350	$1,350	$1,350	$1,350	$1,350	$1,350
PV, Proceeds from the carveout transaction	**$1,324**	**$1,273**	**$1,225**	**$1,178**	**$1,133**	**$1,089**	**$1,048**	**$1,008**	**$969**	**$932**
Adjusted Present value 5)										
Levered value	**$8,798**	**$8,520**	**$7,976**	**$7,659**	**$7,379**	**$7,137**	**$6,907**	**$6,790**	**$6,660**	**$6,609**
EV/EBITDA - Multiple	*10.47x*	*10.14x*	*9.49x*	*9.12x*	*8.78x*	*8.50x*	*8.22x*	*8.08x*	*7.93x*	*7.87x*
Net debt	3,563	3,227	2,873	2,500	2,107	1,690	1,259	824	383	(64)
Equity value at exit	5,234	5,294	5,103	5,159	5,272	5,447	5,649	5,965	6,276	6,673
Implied share price	**$7.84**	**$7.93**	**$7.64**	**$7.73**	**$7.90**	**$8.16**	**$8.46**	**$8.93**	**$9.40**	**$9.99**
Cost of capital										
Equity, E	$1,772	$2,023	$2,276	$2,532	$2,793	$3,065	$3,336	$3,611	$3,877	$4,134
Debt, D	$3,563	$3,227	$2,873	$2,500	$2,107	$1,690	$1,600	$1,600	$1,600	$1,600
Debt-equity ratio, D/E	2.01x	1.59x	1.26x	0.99x	0.75x	0.55x	0.48x	0.44x	0.41x	0.39x
Cost of equity	**16.2%**	**14.7%**	**13.6%**	**12.6%**	**11.8%**	**11.1%**	**10.8%**	**10.7%**	**10.6%**	**10.5%**
Levered, Beta	2.1	1.9	1.7	1.5	1.4	1.2	1.2	1.2	1.2	1.1
Cost of equity	**16.2%**	**14.7%**	**13.6%**	**12.6%**	**11.8%**	**11.1%**	**10.8%**	**10.7%**	**10.6%**	**10.5%**
Debt, Beta	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Cost of debt	**5.7%**	**5.7%**	**5.7%**	**5.7%**	**5.7%**	**5.7%**	**5.7%**	**5.7%**	**5.7%**	**5.7%**
WACC	**7.9%**	**8.0%**	**8.1%**	**8.2%**	**8.4%**	**8.5%**	**8.6%**	**8.6%**	**8.6%**	**8.6%**

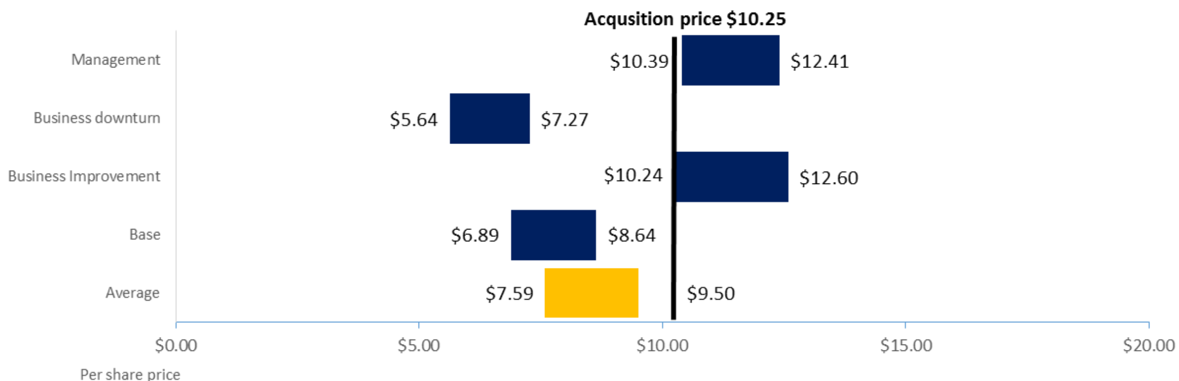
Below is the development of the cost of capital represented. The decrease in debt both reduces the cost of equity and makes the WACC converges towards the cost of equity. The cost of debt is unchanged.



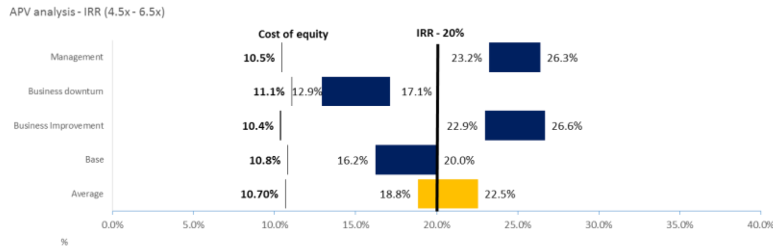
Next step is to apply the exit multiple in order to determine a range for the implied share price of the APV valuation.

3.5.1.Exit multiple (4.5x – 6.5x)

Assuming an exit year of 2024 with a multiple range of 4.5x to 6.5x, the four different scenarios gives the following value ranges:

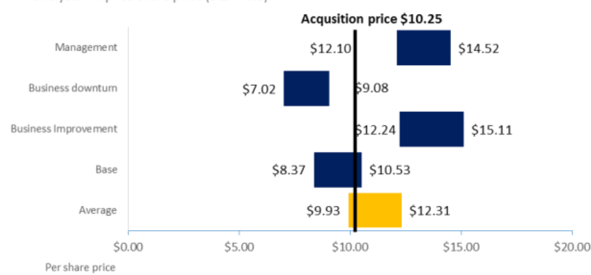


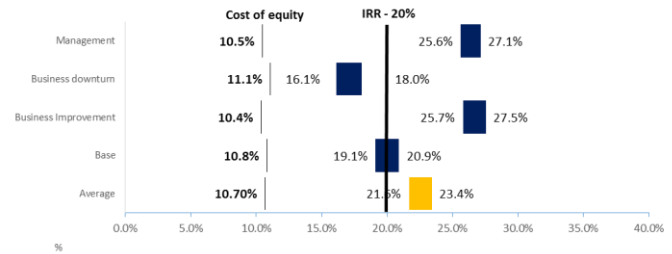
As with the LBO analysis is the average below the acquisition price. The difference is however that the average range is smaller and of lower value compared to the LBO analysis. Further is it only the business improvement scenario that with a very small margin includes the acquisition price. The median share price for all the scenarios is $9.44 representing a (7.9) % decrease. Taking only the business improvement and management scenarios into consideration based on the same argument represented in the LBO analysis, would produce a median share price of $11.40 an 11.2% increase.



The average IRR range implies that the given an exit multiple range of 4.5x to 6.5x, is there good reason to believe the investment in Staples will yield an IRR around 20%. This is however based on implied share prices that on average has lower prices than the acquisition price. Taking all four scenarios into account would to assessment be, that the acquisition price is overvaluing the Staples, giving these multiples.

3.5.2.Precedent valuation exit multiples





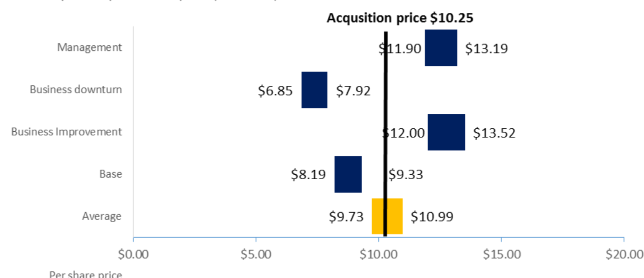
Applying the precedent valuation multiples would deem the acquisition price of Staples as slightly undervalued. The average range does include the price but only barely. The average IRR does however imply that a lower share price would still yield an IRR above 20% on average.

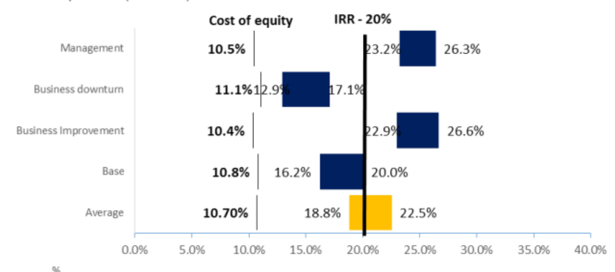
3.5.3.Exit multiple (6.0x to 7.3x)

As shown in the LBO analysis is the exit multiple range of 6.0x to 7.3x more appropriate as it is based on exit multiples for each scenario yielding an IRR above 20%.

Staples Inc.
Implied Valuation Range - APV analysis
($ in millions)

Scenarios: Exit year 2024	Exit Multiple Range			Implied Enterprise value			Less: Net Debt	Implied Equity value			Fully Diluted Shares	Implied Share Prices			IRR			WACC	Cost of Equity
Base	6.0x	-	7.3x	$6,729	-	$7,487	$(1,259)	$5,470	-	$6,228	667.7	$8.19	-	$9.33	16.2%	-	20.0%	8.6%	10.8%
Business Improvement	6.0x	-	7.3x	$8,472	-	$9,488	$(461)	$8,011	-	$9,027	667.7	$12.00	-	$13.52	22.9%	-	26.6%	8.7%	10.4%
Business downturn	6.0x	-	7.3x	$6,205	-	$6,922	$(1,632)	$4,574		$5,290	667.7	$6.85	-	$7.92	12.9%	-	17.1%	8.5%	11.1%
Management	6.0x	-	7.3x	$8,100	-	$8,961	$(157)	$7,943		$8,804	667.7	$11.90	-	$13.19	23.2%	-	26.3%	8.6%	10.5%





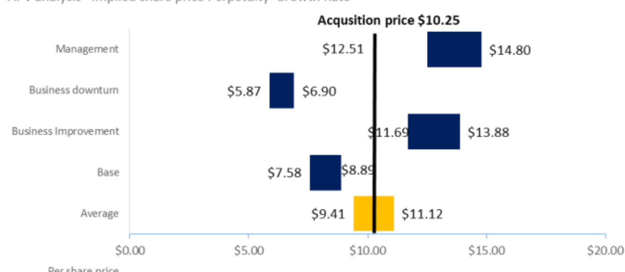
This exit multiple range generate an average that does include the acquisition price. The median implied share price is $10.61 slightly higher than both the LBO price and the acquisition price, with 3.4% and 3.5% receptivity. If only the scenarios of business improvement and management is taken into account, assuming a higher probability of their occurrence, would result in a median price of $12.59 an increase of 22.8%. In terms of the IRR, do both business downturn and base provide IRR below 20%. The IRR do however provide both an average of 20.6% and a median of 21.5%. Again, with having a median implied share price so close to the actual acquisition price indicates that the price paid is very reasonable, also taking time value of money and value of the ITH into account.

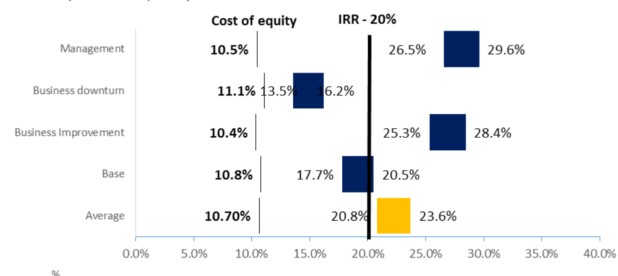
3.5.4.Perpetuity growth rate

With the use of same exit multiples as in the LBO analysis, does it increase the chance of getting very similar results. To increase the depth of this analysis is the terminal value of the unlevered value adjusted for a perpetuity growth rate instead of an exit multiple. The applied perpetuity growth rate range for each scenario, is derived by taking the average growth rate of the projected period and subtracting 1% to create the lower limit and adding 1% to create the upper limit. Assuming an exit year of 2024 did the adjustment yield the following result:

Staples Inc.
Implied Valuation Range - APV analysis (Perpetuity growth rate)
($ in millions)

Scenarios: Exit year 2024	Perpetuity Growth Rate			Implied Exit Multiple Range			Implied Enterprise value			Less: Net Debt	Implied Equity value			Fully Diluted Shares	Implied Share Prices			IRR			WACC	Cost of Equity
Base	(1.0%)	-	1.0%	3.7x	-	7.5x	$6,318	-	$7,195	$(1,259)	$5,059	-	$5,936	667.7	$7.58	-	$8.89	17.7%	-	20.5%	8.6%	10.8%
Business Improvement	0.0%	-	2.0%	2.9x	-	6.8x	$8,265	-	$9,726	$(461)	$7,804	-	$9,265	667.7	$11.69	-	$13.88	25.3%	-	28.4%	8.7%	10.4%
Business downturn	(1.5%)	-	0.5%	4.0x	-	7.7x	$5,548	-	$6,238	$(1,632)	$3,917	-	$4,607	667.7	$5.87	-	$6.90	13.5%	-	16.2%	8.5%	11.1%
Management	0.2%	-	2.2%	3.6x	-	8.1x	$8,512	-	$10,036	$(157)	$8,355	-	$9,879	667.7	$12.51	-	$14.80	26.5%	-	29.6%	8.6%	10.5%





The average range of implied share prices is further supporting the previous finding. The median share price is $10.29 which is very close the acquisition price. In terms of the IRR do the average range indicate, that given the implied share prices is there high chance of achieving an IRR above the 20%. This further supports the finding. Overall does the application of perpetuity growth rate instead of exit multiple change little to the previous result.

3.5.5.Overall assessment

One weakness of the LBO analysis was the lack of adjustment of time value of money. The problem was however that the application of the WACC required the assumption of a constant capital structure. To solve this problem was the APV method used to value each component of the enterprise value separately. To connect the two valuations of LBO and APV was the terminal value of the unlevered valued based on an exit multiple rather than a perpetuity growth rate. Applying different exit multiples to evaluate the implied share price range based on the yielded IRR resulted in the following: The exit multiple range used in the proxy statement indicated an overvalued acquisition price, while the precedent exit multiple range indicated an undervalued price but lower prices might result in an IRR still yielding above 20%. The exit multiples adjusted

for the 20% IRR hurdle rate did however imply that the acquisition price is appropriate and neither overvalue or undervalue the value of Staples. Overall do the APV valuation conclude that the acquisition price is appropriate in terms of and IRR hurdle rate of 20%. Compared to the LBO analysis does the APV differ with a lower level of average IRR, indicating that given the time value of money is the acquisition price more likely to be overvalued.

PART 4

4.1.Conclusion

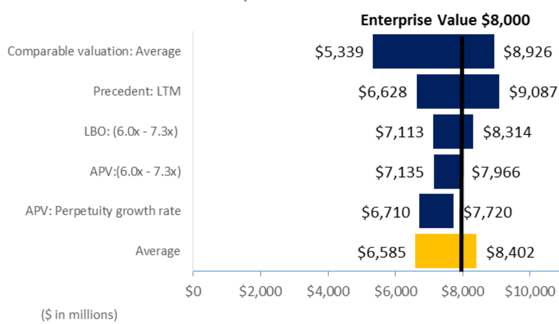
The purpose of this thesis was to assess the appropriateness of the acquisition price of the leveraged buyout of Staples by Sycamore.

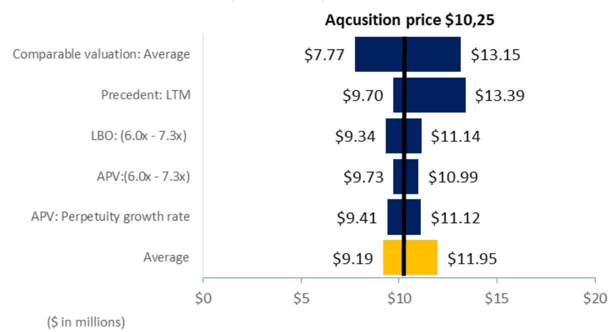
To make a proper assessment, different valuation methods were applied in order to provide a more comprehensive conclusion. The applied valuation methods were: a comparable valuation extrapolating a value range based on the closest peers, a precedent valuation extrapolating a value range based on the most comparable transactions, a LBO valuation, projected FCF based on different scenarios and extrapolating a value range based on exit multiples constrained by an IRR hurdle rate. An APV valuation, adjusted the projected FCF, under the assumption of different scenarios, with an appropriate discount rate, taking the time value of money into account. Further the terminal value was based on the same exit multiples as the LBO valuation, establishing a direct connection to the LBO valuation.

To perform the LBO and APV valuations both a fundamental and strategic analysis were required. These analyses provided necessary information regarding the external and internal factors, necessary to create four different scenarios. Further, did a short analysis of Sycamores' previous deals, combined with a theoretical framework about value creation in LBOs, provide further depth to the creation of the scenarios.

The comparable valuation concludes that the acquistion price was sliglthy overvalued with a low margin, given the most comparable companies. This valuation method did however not take premiums into account. The precedent valuation taking premiums into account, did however indicate a slight underpriced acquistion price. The LBO valuation based on the four scenarios found that the acquistion price is very appropriate given an IRR hurdle rate of 20%. The APV valuation had a very similar finding, with a slight indication of an overvalued price. Overall, given an IRR hurdle rate of 20% and an exit year of 2024, the acquistion price of Staples of $10.25 is assessed as an appropriate price taking both different valuation methods and scenarios into account. There might, however, be a slight indication of an overvalued price.

Below is the complete overview of the extrapolated valuation ranges for each individual valuation method.





The discussion will evaluate the result and structure of the thesis, together with an overall review of the assumptions and limitations used.

4.2.Discussion

The results of the thesis' valuations deem the acquisition price of $10.25 for the LBO of Staples as appropriate, assuming an exit year of 2024 and an IRR hurdle rate of 20%. The conclusion of this thesis is that Sycamore paid a reasonable price for Staples taken various factors into account. The results further support Sycamore´s ability to find valuable deals and negotiate proper deals.

The thesis approach was to valuate Staples through various valuation methods to get a comprehensive idea of the extent to which the acquisition price might be over- or under-valued. The use of different valuation methods strengthens the overall argument and result of the thesis as the various methods cover a wider range of options and address valuation differently. Some of these valuations were based on different produced scenarios. The use of different scenarios is a very appropriate way to encounter, the usual level of uncertainty a projection has. These scenarios were based upon both a fundamental analysis and a strategic analysis. The fundamental analysis reorganized the statements, providing a thorough analysis of Staples´ operation. Before the fundamental analysis was applied both a comparable and precedent valuation were made. The reason for this order is due to the establishment of truly comparable companies in the comparable valuation. This concluded in Office Depot as the only truly comparable company. Having Office Depot as the most comparable peer made the fundamental analysis possible and provided a necessary benchmark to complete the assessment. The Strategic analysis has a lot of emphasis on the external environment, as internal factors are already touched upon in both the fundamental analysis and the section description of Staples. The assumptions and scenarios are structured to provide distinctive scenarios, a bridge between the analyses and theory, and lastly, work as direct drivers of the LBO model. The LBO model was made with a level of detail allowing for the implementation of the scenarios. The exit multiple ranges used to produce the implied share price ranges, included the same multiples as in the proxy statement and the precedent valuation. This was done to make the implied share prices comparable to both valuations. To assess the appropriateness of the acquisition price a required rate of return was needed. This requirement was fulfilled by a 20% IRR hurdle rate. Based on this rate it was possible to produce an exit multiple range. The implied share prices produced by this range of multiples would on average depict implied share prices that yield IRRs above 20%. The APV was approached carefully and adjustments to especially the terminal value were deemed necessary. To apply the same exit multiple to the terminal value allowed the LBO valuation and APV valuation to be compared. To address the possibility of too much similarities between the two valuations,

the APV analysis also includes a valuation based upon perpetuity growth rates instead of exit multiples. With all these considerations the overall assessment is that the price was appropriate.

However, the thesis is very dependent on the assumptions of both an exit year of 2024 and an IRR hurdle rate of 20%. Had the exit year been different, it would very possibly yield a different outcome. The sensitivity analysis in the LBO analysis did however provide arguments for these assumptions. The carve-out posed a problem of splitting Staples in two. The comparable and precedent valuation are both based on a consolidated Staples. Likewise, also the fundamental analysis is based on a consolidated Staples. The LBO and APV valuation could have been done based on the consolidated Staples, disregarding the carve-out entirely. The solution, however, was to use the proceeds from the carve-out as a proxy for the carve-out B2C unit. Valuing this unit separately would have been more appropriate and would have further enhanced the overall assessment. It was however indicated by new reports that Sycamore was interested in selling off the B2C unit fairly quickly. This supports the use of a proxy value for the unit. The use of scenarios has the advantage of providing a good tool to address uncertainty. It does however pose a problem with both making an overall assessment and the use of sensitivity analysis. The different scenarios are however another way of making use of a sensitivity analysis.

This thesis is based on public information, had there been more extensive information about Sycamore partners transactions, required returns and exit strategies would this contributed to a more comprehensive and complete assessment.

Lastly, do the authors hope this thesis can contribute to case-orientated evaluations of LBOs.

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Appendix

Appendix 1, exhaustive history time line of Staples

Year	Category:	Event
1986	Opening	Opens first office supply superstore in Boston
1989	IPO	Staples made an initial public offering of $36 million.
1990	Webpage	Launche staples.com
1991	Canada	Opens first office superstore in Canada
1992	Europe	Enters European market through UK investments
1996	Fortune 500	Staples becomes a member of Fortune 500
1996	Merger:denied	Staples and Office depot is denied a merge from the Federal Trade commission
1999	Online services	Launche first phase of online business solutions center
1999	Europe	Expands its operation in Europe through Germany, Netherlands and Portugal
2004	Sourth America	Acquires Officenet, B2B office supplies in Brazil and Argentina
2007	India/China	Opens first store in India and two co-branded stores in Beijing China
2008	Acquisition: B2B	Acquires Corporate Express, helps etablish its B2B business
2010	B2B	Launche Staples Technology Solutions, centralized B2B solutions service center
2012	Online integration	Annouce strategic plan to integrate retail and online offering and raise investment in online businesses
2012	Cost savings	Announce initiate to multi-year cost-savings plan and restructure of international operations
2013	Digitalization	Launches first omnichannel stores, combining retail network and digital capabilities
2014	New categories	Adds 8 new categories to its retail stores.
2014	Closing stores	Annouce it will close 225 stores in North America to cut costs
2015	Merger:denied	Staples and Office depot is denied a merge from the Federal Trade commission again
2016	New services	Announce plans to expand into solutions-oriented services and products through licensing agreements
2016	20/20 plan	Staples will focus on its North American operation, and begin sell of its international operation
2016	Annual report	Annual report reports a decrease in sales for the third time in a row
2017	20/20 plan	1Q of 2017: completed sale of operation in Australiza, New Zeeland, Europe and will pursue to sell of the rest
2017	LBO	In June, Sycamore Partners signed an agreement to acquire Staples for US$6.9 billion.

Appendix 2, exhaustive list of products and services of Staples

Staples Inc. Services			
Print services:			
Copies and documents	Engineering prints	Brochures	Photo gifts
Business cards	Invitations and announcements	Flyers	Name badges and tags
Same day products	Presentation materials	Calendars	Return address labels
Signs, banners, posters	Postcards	Custom stamps	Documents scanning
Marketing services:			
Digital marketing	Promotional products		
Business cards	Branding and design		
Signs, banners, posters	Direct mail		
Marketing materials			
Shipping services:			
Shipping			
US postal service			
UPS			
Tech services:			
Virus removal	Tablets and iPad repair	Data backup	Liquid screen protection
Virus protection	Device setup	Data recovery	Records and Cloud management
PC tune up	Wireless networking, setup and repa	PC and memory upgrade	
Phone repair	Tech support	Software installation	
Office services:			
Office cleaning	Plumbing	Carpentry and construction	Environmental services
Food and drink	Electrical	Specialty cleaning	Office relocation
Office help	Appliances	Security	Wellness
Mounting and hanging	Painting	Heating, ventilation and AC	Events
		IT security	Office decor
Other			
Finance center:	**Additional services:**	**Brands:**	
Small business loans	Business hub	Staples	
Credit center	Recycling and eco	Quill.com	
Merchant services	Staple easy system	Corporate Express	

Appendix 3, Staples worldwide retail stores and distribution center

Retail Stores, 2016

United States		United States		Canada		Other	
State	Stores	State	Stores	Territory	Stores	Country	Stores
Alabama	10	New Hampshire	20	Alberta	39	Argentina	14
Arizona	24	New Jersey	71	British Columbia	41	Australia	9
Arkansas	7	New Mexico	9	Manitoba	10	Brazil	1
California	175	New York	112	New Brunswick	8		
Colorado	17	North Carolina	44	Newfoundland	4		
Connecticut	33	North Dakota	2	Nova Scotia	12		
Delaware	7	Ohio	50	Northwest Territories	1		
District of Columbi	1	Oklahoma	16	Ontario	112		
Florida	74	Oregon	17	Prince Edward Island	2		
Georgia	28	Pennsylvania	87	Quebec	64		
Idaho	8	Rhode Island	8	Saskatchewan	10		
Illinois	32	South Carolina	20	Yukon	1		
Indiana	20	South Dakota	1				
Iowa	12	Tennessee	17				
Kansas	5	Texas	47				
Kentucky	14	Utah	10				
Maine	10	Vermont	6				
Maryland	38	Virginia	38				
Massachusetts	62	Washington	23				
Michigan	34	West Virginia	4				
Minnesota	5	Wisconsin	7				
Missouri	10	Wyoming	3				
Montana	7						
Nebraska	4						
Nevada	6						
Total United State	**1255**						
Total Canada	**304**						
Total Other	**24**						
Total Stores, 2016	**1255**						

Distribution and fulfillment centers, 2016

United States		Canada		Other	
State	Centers	Territory	Centers	Country	Centers
Arizona	1	Alberta	3	China	8
Alaska	1	British Columbia	2	Argentina	1
California	4	Manitoba	1	Brazil	1
Colorado	1	New Foundland	1	Taiwan	1
Connecticut	2	Nova Scotia	2	Australia	13
Florida	1	Ontario	3		
Georgia	2	Quebec	2		
Idaho	1				
Illinois	1				
Indiana	1				
Iowa	2				
Kansas	1				
Maryland	2				
Massachusetts	2				
Minnesota	2				
New Jersey	1				
New York	2				
North Carolina	2				
Ohio	1				
Oregon	3				
Pennsylvania	1				
Tennessee	1				
Texas	3				
Washington	1				
Wisconsin	1				
Total United States	**40**				
Total Canada	**14**				
Total Other	**24**				
Total centers 2016	**78**				

Appendix 4, Sycamore's acquisition history

Year	Category:	Event
2011	Foundation	Sycamore Partners is founded by Stefan Kaluzny and Peter Morrow
	Talbots	Acquires 9.9% stake in Talbots, a leading retailer for traditional women's apparel, shoes and accessories, for $21.62 million
	MGF Sourcing	Acquires 51% stake in MGF Sourcing, a global sourcing company specialized in apparel, footwear, accessories and other household goods
2012	Acquisition: Talbots	Finalizes acquisition of the remaining 90.9% stake in Talbots, for $391 million
	Foundation: Pathlight Capital	Pathlight Capital is founded, a commercial finance and loan broker company for companies within the retail and consumer sector
2013	Acquisition: Hot Topic	Acquires Hot Topic, a counterculture and teenager clothing retailer, for $592.35 million
2014	Acquisition: Jones Group, Inc.	Finalizes acquisition of the Jones Group Inc., for approximately $2.2 billion
	Carve-out: Jones Group, Inc.	Jones Group Inc. is split into five different companies: Jones New York, Kurt Geiger, Stuart Weitzman, Nine West Holdings and The Kasper Group
	Acquisition: Coldwater Creek	Acquires intellectual property of Coldwater Creek, a retailer for women's apparel, accessories and home décor
2015	Sell: Stuart Weitzman	Sells Stuart Weitzman, its american luxury shoe and accessories retailer to Coach, Inc. for $574 million
	Sell: Jones New York	Sells Jones New York, its multi-channel wholesaler and retailer of women's sportwear to Authentic Brands Group
	Carve-out: Hot Topic	The Hot Topic subsidiary Torrid, a women's plus-size retail chain, is spun off the Hot Topic parent and becomes an independent company in Sycamore's portfolio
	Acquisition: Dollar Stores	Acquires 330 Family Dollar Stores, some of the nation's leading discount variety stores, from Dollar Tree, Inc. operating them under the name Dollar Express
	Acquisition: EMP Merch	Acquires EMP Merchandising, a German online metal music related clothing retailer
	Sell: Pathlight Capital	Sells Pathlight Capital to PE firm Lightyear Capital LLC
	Acquisition: Belk, Inc.	Acquires Belk Inc., an American department store operator, for $3 billion
	Sell: Kurt Geiger	Sells Kurt Geiger, its British upmarket show and accessories retailer to British PE firm Cinven
	Acquisition: MGF Sourcing	Acquires the remaining 49% stake in MGF Sourcing
2016	Sell: Easy Spirit	Sells Easy Spirit, a Nine West Holdings brand for comfortable women's shoes to Marc Fisher Footwear
2017	Incorporation: The Kasper Group	Standalone company The Kasper Group, acquired through the Jones Group Inc. acquisition in 2014 and separated from its parent company is reincorporated into Nine West Holdings
	Acquisition: The Limited	Wins bid for The Limited, an american women's apparel retailer, for $26.8 million
	Sell: Dollar Express	Sells the 330 Dollar Express stores to its competitor Dollar General
	Acquisition: NBG Home	Acquiring NBG Home, an American home decor and furniture manifacturer
	Acquisition: Staples, Inc.	Acquires Staples Inc., an american office supply megastore retailer, in a $6.9 billion buyout

Appendix 5, detailed deal overview of Sycamore's historical investments

Sycamore Partners - Investment history

Date	Target	Business description	Deal description	Deal value	Motive
Nov. 3 2011	Mast Global Fashions	Third-party apparel sourcing division of Limited Brands. Mast Global Fashions provides apparel sourcing and logistics services.	Sycamore acquired a controlling 51 % interest. Limited Brands will still retain 100% ownership of its separate sourcing operation.	Terms of the transaction were not disclosed	*"This is exactly the kind of business that Sycamore is looking to invest in - experienced leadership, a proven track record of success, and strong growth potenti* al" - Peter Morrow, Managing director at Sycamore
Aug. 7 2012	Talbots	Leading specialty retailer and direct market of women´s apparel, shows and accessories. Operates 516 stores in 46 states and Canada as of 2012	Acquired Talbot through an affiliate, TLB Merger Sub Inc. For $2.75 per share in cash.	Approximately $391 milllion, including net debt	Focus on long-term, positive growth. Appointment of new senoir execute team, of veteran retailers.
Jun. 12 2013	Hot Topic	Mall and web based speciality retailer. Offers music/pop culture-licensed and music/pop culture-influenced apparel, accessories, music and gift items for young men and women. Also includes Torrid and Blackheart, which offers lingerie.	Acquired for $14.00 per share in cash, through a one-step merger	Approximately $600 million.	*"Hot Topic and Torrid are both leaders in their categories, and we are excisted to have both brands as part of our portfolio"* - Stefan Kaluzny, Managing director at Sycamore
Apr. 1 2014	Kurt Geiger	Leading authority on designer footwear and accessories. Based in UK, and has 70 stores worldwide and operates in concessions within the world´s most prestigious department stores.	Management-led buyout, operating as a independent company, supported by Sycamore partners. Had previous been a division of The Jones Group inc.	Approximately £245 million, around $410 million.	*"The company has great potential for growth, and we look forward to working with Neil and the Kurt Geiger (CEO, Kurt Geiger) team to help position the business for long-term success"* - Stefan Kaluzny, Managing director at Sycamore
Apr. 9 2014	The Jones Group	Leading global designer, marketer and wholesaler of over 35 brands with product expertise in appareal, footwear, jeanswear, jewelry and handbags.	Acquired for $15.00 per share in cash, through a one-step merger.	Approximately $2,200 million. *($1,200 million in equity and $1,000 million in net debt.)*	*"We look forward to working with The Jones Group team to continue to grow this outstanding portfolio of businesses and brands and create exceptional products for out customers"* - Stefan Kaluzny, Managing director at Sycamore
Apr. 15 2014	Stuart Weitzman, the Nine West Group, Jeanswear company, Jones New York and Kasper Group. (The Jones Group)	Stuart Weitzman: Global leader in designer footwear. The Nine West Group: Provide shared service functions. Jeanswear company: Leading global jeans company. Jones New York: Women apperal Kasper Group: Designer and marketer of suits and dresses.	In the conjunction with the acquistion of The Jones Group, will all be indepedent leaded companies with own management. (Same procedure with Kurt Geiger)	N/A	*"We believe that this structure will allow each of these businesses to better serve their customers and achieve long-term success"* - Stefan Kaluzny, Managing director at Sycamore
Jun. 9 2014	Coldwater Creek brand and other intellectual property	American catalog and online retailer of women´s apparel, accessories and home décor.	Acquired through a Sycamore affiliate CWC Direct LLC in conjunction with Coldwater Creek´s ongoing Chapter 11 proceedings in the U.S. Bankruptcy Court as an independent portfolio company.	Terms of the transaction were not disclosed	*"We are excited about adding Coldwater Creek to our growing portfolio of leading retail brands and lookfoward to reintroducting the brand to the market place"* - Peter Morrow, Managing director at Sycamore
Aug. 6 2015	E.M.P Merchandizng	Germany-based multi channel retailer. Sells rock music-inspired merchandise. Pan-European operation and main sales channel is through a web-shop.	Terms of the transaction were not disclosed	Terms of the transaction were not disclosed	*"We are pleased to partner with EMP, Europe´s leading multi-channel retailer of music and entertainment-inspired apparel and accessories, and look forward to forging closer relationships with out music and entertainment industry partners on a global basis"* - Peter Morrow, Managing director at Sycamore
Nov. 5 2015	330 Family Dollar Stores	US´s leading operator of discount variety stores selling everything for $1 or less.	Dollar Tree divests 330 Family Dollar stores to Dollar Express LLC, a portfolio company for Sycamore Parnters.	Terms of the transaction were not disclosed	*"We believe out significant experience with carve-out transactions will be beneficial in supporting the Dollar Express team to serve out loyal customers and create value"* - Peter Morrow, Managing director at Sycamore
Dec. 10 2015	Belk, Inc	US´s largest family owned and operated department store. Offers National brands and private label fashion apparel, shoes and accessories for the entire family.	Acquired for $68.00 per share in cash, through a one-step merger.	Approximately $3,000 million, including debt	*"We believe Belk is positioned for continued growth and success"* - Stefan Kaluzny, Managing director at Sycamore
Feb. 24 2017	The Limited´s Brand and realted intellectual propery	American clothing company, focus on women´s clothing and apparel	Acquired through a competitive auction run by The Limited as part of its ongoing Chapter 11 proceddings in the US Bankruptcy court.	$26.75 million offer.	Sycamore plans to reintroduce the brand to the marketplace at a later date.
Apr. 27 2017	NBG Home	NBG Home designs, manufactures, and markets home decor products. The Company offers furniture, hardwire and outdoor lighting, drapery hardware, rugs, and bedding products. NBG Home serves retail industry worldwide	Secondary buyout, from Kohlberg & Company.	Approximately $3,500 million.	*"We are excited about the opportunity to invest in an attractive niche of the consumer products industry and look forward to building NBG alongside its best-in-class management team"* - Peter Morrow, Managing director at Sycamore
Sep. 12 2017	Staples, Inc.	Staples is a global supplier of office products and services, offering a broad selection of office supplies, electronics, technology and office furniture, as well as business services including computer repair, copying and printing.	Acquired Staples through an affiliate, Arch Merger Sub Inc. For $10.25 per share in cash.	Approximately $8,000 million. Including debt and fees. $6,700 for the equity.	*"Staples is well-positioned to leverage its iconic brand and leading competitive position to drive even greater value of its business-to-business and retail customers in the US and Canadate"* - Stefan Kaluzny, Managing director at Sycamore
May 21, 2018	CommerceHub, Inc	Distribution commerce network company, connecting supply, demand and delivery that help retailers and brand increase sales by expanding product assortments, promoting products on the channels that perform, and enabling rapid, on-time customer delievery.	Acquired CommerceHub together with private equity firm GTCR in an all cash deal. $22.75 in cash per share.	Approximately $1,100 million.	*"We are excited about this opportunity to build on CommerceHub´s unique position as a valued strategic partner to leading retailers"* - Stefan Kaluzny, Managing director at Sycamore

Sources: Sycamore press releases and news articles

Appendix 6. Staples Reported balance sheet

Reported balance sheet Fundamental analysis - Reported statements *($ in millions)*					
ASSETS	**2012**	**2013**	**2014**	**2015**	**2016**
Current Assets:					
Cash and Cash Equivalents	$1,334	$493	$627	$825	$1,137
Receivables, net	1,816	1,839	1,928	1,543	1,538
Merchandise inventories, net	2,314	2,328	2,144	1,791	1,737
Prepaid Expenses and other current assets	347	400	253	273	251
Current assets of discontinued operations	171	-	-	680	568
Total current assets	**$5,982**	**$5,060**	**$4,952**	**$5,112**	**$5,231**
Property and Equipment, net	$1,963	$1,871	$1,705	$1,286	$1,147
Intangible assets, net of accumulated amortization	385	383	335	235	205
Goodwill	3,221	3,234	2,680	2,032	1,290
Other Assets	730	628	641	497	398
Noncurrent Assets of discontinued operations	-	-	-	1,010	-
Total assets	**$12,280**	**$11,175**	**$10,314**	**$10,172**	**$8,271**
LIABILITIES AND STOCKHOLDERS´ EQUITY					
Current Liabilities					
Account Payable	$1,896	$1,997	$1,867	$1,685	$1,706
Accrued Expenses and other current liabilities	1,406	1,267	1,332	1,160	1,023
Debt maturing within one year	987	104	92	15	519
Current liabilities of discontinued operations	130	-	-	405	402
Total current liabilities	**$4,419**	**$3,368**	**$3,291**	**$3,265**	**$3,650**
Long-term debt	$1,002	$1,000	$1,024	$1,016	$529
Other long-term obligations	723	665	686	441	396
Noncurrent liabilities of discontinued operations	-	-	-	66	-
Stockholders´ equity:					
Preferred stock	-	-	-	-	-
Common stock,	1	1	1	1	1
Additional paid-in capital	4,711	4,866	4,935	5,010	5,067
Accumulated other comprehensive loss	(389)	(507)	(1,041)	(1,116)	(1,053)
Retained earnings	6,694	7,002	6,829	6,900	5,092
Less: Treasury stock at cost	(4,889)	(5,229)	(5,419)	(5,419)	(5,419)
Total Staples, Inc. stockholders' equity	$6,128	$6,132	$5,305	$5,376	$3,688
Noncontrolling interests	$8	$9	$8	$8	$8
Total stockholders' equity	$6,136	$6,141	$5,313	$5,384	$3,696
Total liabilities and stockholders' equity	**$12,280**	**$11,175**	**$10,314**	**$10,172**	**$8,271**

Appendix 7. The reported deferred income taxes.

Reported deferred income taxes
Fundamental analysis - Reported statements
($ in millions)

Deferred income tax assets	2012	2013	2014	2015	2016
Deferred rent	$39	$35	$28	$22	$20
Foreign tax credit carryforwards	66	7	3	-	-
Net operating loss carryforwards	336	334	288	70	59
Capital loss carryforwards	20	18	27	13	14
Employee benefits	135	124	159	98	87
Merger related charges	7	-	-	-	-
Bad debts	-	16	20	18	16
Inventory	34	39	25	14	17
Insurance	39	36	37	34	32
Deferred revenue	52	16	14	11	12
Depreciation	30	57	50	19	22
Financing	31	31	26	36	1
Accrued expenses	21	19	15	20	13
Store closures	-	5	35	35	25
Acquisition Costs	-	-	-	20	-
Unrealized loss on hedge instruments	-	-	-	-	-
Other—net, assets	59	11	14	10	14
Total deferred income tax assets	$869	$748	$741	$420	$332
Total valuation allowance	(410)	(414)	(350)	(76)	(85)
Net deferred income tax assets	$459	$334	$391	$344	$247
Deferred income tax liabilities:	2012	2013	2014	2015	2016
Intangibles	(125)	(143)	(142)	(104)	(91)
Depreciation	-	-	-	(34)	(36)
Other—net, liability	(2)	1	(3)	(3)	(5)
Total deferred income tax liabilities	$(127)	$(142)	$(145)	$(141)	$(132)
Net deferred income tax assets	$332	$191	$246	$203	$115

Appendix 8. Office Depot´s individual adjustment tables

Other operating assets, net other liabilities
Fundamental analysis - Reorganized statements
($ in millions)

	2011	2012	2013	2014	2015	2016
Plus: Other assets, net overfunded pension	$343	$369	$308	$256	$184	$637
Less: Deferred income taxes and other long-term liabilities	452	429	719	541	421	361
Less: Accrued expenses and other current liabilities	748	728	1,144	1,171	853	826
Less: Operating deferred-tax assets (liabilities)(1)	(3)	10	136	64	15	523
Less: Non-operating deferred-tax assets (liabilities)(1)	(190)	(187)	(235)	(268)	(227)	272
Other operating assets, net other liabilities	$(665)	$(611)	$(1,456)	$(1,252)	$(878)	$(1,345)

(1) Detailed in reorganized deferred income taxes

Accrued expenses and other current liabilities
Fundamental analysis - Reported statements
($ in millions)

	2011	2012	2013	2014	2015	2016
Accrued pay-roll related amounts	262	204	319	343	221	176
Accrued expenses and other current liabilities	748	728	1,144	1,171	853	826
Total accrued expenses and other current liabilities	$1,010	$932	$1,463	$1,514	$1,074	$1,002

Other assets
Fundamental analysis - Reported statements
($ in millions)

	2011	2012	2013	2014	2015	2016
Overfunded pension	0	$8	$8	$18	$30	$48
Other assets	294.9	336.0	273.0	220.0	173.0	171.0
Total other assets	$294.90	$344.00	$281.00	$238.00	$203.00	$219.00

Adjustment to Goodwill and Acquired intangibles

Fundamental analysis - Reorganized statements

($ in millions)

	2011	2012	2013	2014	2015	2016
Goodwill	61.9	64.0	398.0	391.0	363.0	363.0
Fair value adjustment, timber notes	-	-	127.0	108.0	87.0	67.0
Acquired intangibles	35.223	17.000	113.000	72.000	53.000	33.000
Goodwill and acquired intangibles, less tax gross-up	**$97.1**	**$81.0**	**$638.0**	**$571.0**	**$503.0**	**$463.0**
Cumulative impairment of goodwill	1,213	1,213	1,257	1,257	1,257	1,272
Cumulative amortization of acquired intangibles	(20)	(17)	(21)	(50)	(59)	(59)
Cumulative tax shield	(38)	(0)	24	(0)	12	(28)
Cumulative amortization and impairment	**$1,155**	**$1,196**	**$1,261**	**$1,207**	**$1,210**	**$1,185**
Adjusted goodwill and acquired intangibles	**$1,252**	**$1,277**	**$1,899**	**$1,778**	**$1,713**	**$1,648**

Reported deferred income taxes

Fundamental analysis - Reported statements

($ in millions)

Deferred income tax assets	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
U.S. and foreign net operating loss carryforwards	$380	$367	$314	$322	$79	$275
Deferred rent credit	102	95	97	80	68	61
Pension and other accrued compensation	79	61	170	184	200	134
Accruals for facility closings	33	21	38	45	43	29
Inventory	14	14	25	23	19	20
Self-insurance accruals	21	19	33	33	33	29
Deferred revenue	6	7	34	39	45	24
U.S. and foreign income tax credit carryforward	14	8	234	246	223	197
Allowance for bad debts	3	3	8	5	12	5
Accrued expenses	8	24	60	80	32	28
Basis difference in fixed assets	-	40	15	59	73	69
Other items, net	47	41	6	8	-	5
Total deferred income tax assets	**$704**	**$700**	**$1,034**	**$1,124**	**$827**	**$876**
Valuation allowance	(622)	(583)	(683)	(804)	(522)	(140)
Net deferred income tax assets	**$83**	**$117**	**$351**	**$320**	**$305**	**$736**

Deferred income tax liabilities:	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Internal software	4	3	22	8	5	5
Installment gain on sale of timberlands	-	-	258	251	263	260
Basis difference in fixed assets	32	-	-	-	-	-
Deferred Subpart F income	11	11	23	27	27	-
Undistributed foreign earnings	-	72	12	2	2	8
Deferred tax liabilities	**$47**	**$86**	**$315**	**$288**	**$297**	**$273**
Net deferred tax assets	**$35**	**$31**	**$36**	**$32**	**$8**	**$463**

Reorganized deferred income taxes

Fundamental analysis - Reorganized statements

($ in millions)

Operating deferred taxes	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Deferred rent credit	102	95	97	80	68	61
Accruals for facility closings	33	21	38	45	43	29
Inventory	14	14	25	23	19	20
Self-insurance accruals	21	19	33	33	33	29
Deferred revenue	6	7	34	39	45	24
Accrued expenses	8	24	60	80	32	28
Other items, net	47	41	6	8	-	5
Internal software	(4)	(3)	(22)	(8)	(5)	(5)
Operating deferred-tax assets (liabilities)	**$225**	**$218**	**$271**	**$300**	**$235**	**$191**
Increase(decrease) in operating deferred taxes		*$(7)*	*$53*	*$29*	*$(65)*	*$(44)*
Non-operating deferred taxes						
U.S. and foreign net operating loss carryforwards	380	367	314	322	79	275
U.S. and foreign income tax credit carryforward	14	8	234	246	223	197
Valuation allowance	(622)	(583)	(683)	(804)	(522)	(140)
Loss and credit carryforwards, net of tax	**$(228)**	**$(208)**	**$(135)**	**$(236)**	**$(220)**	**$332**
Pension and other accrued compensation	$79	$61	$170	$184	$200	$134
Allowance for bad debts	3	3	8	5	12	5
Basis difference in fixed assets	-	40	15	59	73	69
Installment gain on sale of timberlands	-	-	(258)	(251)	(263)	(260)
Basis difference in fixed assets	(32)	-	-	-	-	-
Deferred Subpart F income	(11)	(11)	(23)	(27)	(27)	-
Undistributed foreign earnings	-	(72)	(12)	(2)	(2)	(8)
Non-operating deferred-tax assets (liabilities)	**$(190)**	**$(187)**	**$(235)**	**$(268)**	**$(227)**	**$272**
Net deferred-tax assets (liabilities)	**$35**	**$31**	**$36**	**$32**	**$8**	**$463**

Tax Table in $

Fundamental analysis - Reported statements

($ in millions)

	2011	**2012**	**2013**	**2014**	**2015**	**2016**
Federal tax computed at the statutory rate	$11	$(26)	$44	$(102)	$40	$160
State taxes, net of Federal benefit	1	1	3	1	5	(20)
Foreign income taxed at rates other than Federal	(22)	(15)	(28)	8	6	-
Increase (decrease) in valuation allowance	(8)	(9)	8	85	(46)	(349)
Non-deductible goodwill impairment	-	-	15	-	-	-
Non-deductible merger expense	-	-	13	-	11	-
Non-deductible foreign interest	12	10	8	-	-	-
Other non-deductible expenses	-	3	4	13	4	3
Non-taxable income and additional deductible expenses	-	-	-	(2)	(2)	(13)
Change in unrecognized tax benefits	(77)	1	-	-	-	(3)
Tax expense from intercompany transactions	5	2	2	-	6	-
Subpart F and dividend income, net of foreign tax credits	10	-	75	2	1	2
Change in tax rate	2	2	2	-	-	-
Non-taxable return of purchase price	-	(22)	-	-	-	-
Deferred taxes on undistributed foreign earnings	-	68	5	-	-	-
Tax accounting method changing ruling	-	(16)	-	-	-	-
Other items, net	3	3	(4)	(3)	(2)	-
Reported tax expense	**-$63**	**$2**	**$147**	**$2**	**$23**	**-$220**

Step 1: Tax Table in %

Fundamental analysis - Reported statements

($ in millions)

	2011	2012	2013	2014	2015	2016
Pre-tax income from continuing operations	**$33**	**-$75**	**$127**	**-$291**	**$115**	**$459**
Federal tax computed at the statutory rate	33%	35%	35%	35%	35%	35%
State taxes, net of Federal benefit	3%	(1%)	2%	(0%)	4%	(4%)
Foreign income taxed at rates other than Federal	(67%)	20%	(22%)	(3%)	5%	0%
Increase (decrease) in valuation allowance	(24%)	12%	6%	(29%)	(40%)	(76%)
Non-deductible goodwill impairment	0%	0%	12%	0%	0%	0%
Non-deductible merger expense	0%	0%	10%	0%	10%	0%
Non-deductible foreign interest	36%	(13%)	6%	0%	0%	0%
Other non-deductible expenses	0%	(4%)	3%	(4%)	3%	1%
Non-taxable income and additional deductible expenses	0%	0%	0%	1%	(2%)	(3%)
Change in unrecognized tax benefits	(233%)	(1%)	0%	0%	0%	(1%)
Tax expense from intercompany transactions	15%	(3%)	2%	0%	5%	0%
Subpart F and dividend income, net of foreign tax credits	30%	0%	59%	(1%)	1%	0%
Change in tax rate	6%	(3%)	2%	0%	0%	0%
Non-taxable return of purchase price	0%	29%	0%	0%	0%	0%
Deferred taxes on undistributed foreign earnings	0%	(91%)	4%	0%	0%	0%
Tax accounting method changing ruling	0%	21%	0%	0%	0%	0%
Other items, net	9%	(4%)	(3%)	1%	(2%)	0%
Effective tax rate	***(191%)***	***(3%)***	***116%***	***(1%)***	***20%***	***(48%)***

Step 2: Marginal tax on EBITA

Fundamental analysis - Reorganized statements

($ in millions)

	2011	2012	2013	2014	2015	2016
Federal tax computed at the statutory rate	33.3%	34.7%	34.6%	35.1%	34.8%	34.9%
State taxes, net of Federal benefit	3.0%	(1.3%)	2.4%	(0.3%)	4.3%	(4.4%)
Marginal tax rate	**36.4%**	**33.3%**	**37.0%**	**34.7%**	**39.1%**	**30.5%**
Adjusted EBITA	$203	$(43)	$(75)	$144	$240	$317
Marginal tax on EBITA	**$73.7**	**$(14.3)**	**$(27.9)**	**$50.0**	**$93.7**	**$96.6**

Step 3: Adjusting taxes for other operating items

Fundamental analysis - Reorganized statements

($ in millions)

Operating tax	2011	2012	2013	2014	2015	2016
Foreign income taxed at rates other than Federal	$(22)	$(15)	$(28)	$8	$6	0
Other items, net	3	3	(4)	(3)	(2)	-
Other operating taxex	**$(19)**	**$(12)**	**$(32)**	**$5**	**$4**	**0**
Marginal tax on EBITA	$74	$(14)	$(28)	$50	$94	$97
Operating taxes	**$55**	**$(26)**	**$(60)**	**$55**	**$98**	**$97**
Non-operating taxes						
Operating taxes	$55	$(26)	$(60)	$55	$98	$97
Reported taxes	(63)	2	147	2	23	(220)
Non-operating taxes	**$(118)**	**$28**	**$207**	**$(53)**	**$(75)**	**$(317)**
Operating cash taxes						
Operating taxes	$55	$(26)	$(60)	$55	$98	$97
Increase(decrease) in operating deferred taxes (1)	-	(7)	53	29	(65)	(44)
Operating cash taxes	**$55**	**$(33)**	**$(7)**	**$84**	**$33**	**$53**

(1) Detailed in reorganized deferred income taxes

Rent expenses

Fundamental analysis - Reported statements

($ in millions)

	2011	2012	2013	2014	2015	2016
Rent expense	$447	$429	$458	$602	$513	$484
Total	**$447**	**$429**	**$458**	**$602**	**$513**	**$484**

Operating capitalized lease

Fundamental analysis - Reorganized statements

($ in millions)

	2011	2012	2013	2014	2015	2016
Rent expense	$447	$429	$458	$602	$513	$484
Asset life	10.9	10.9	10.9	10.9	10.9	10.9
Cost of debt, AA-rated	4.7%	3.7%	3.9%	3.8%	3.7%	3.4%
Total operating capitalized lease	**$3,232**	**$3,335**	**$3,496**	**$4,640**	**$3,994**	**$3,846**

Implied interest

Fundamental analysis - Reorganized statements

($ in millions)

	2011	2012	2013	2014	2015	2016
Credit rating	**B1**	**B1**	**B1**	**B1**	**B1**	**B1**
Default spread	3%	3%	3%	3%	3%	3%
AA-rated	5%	4%	4%	4%	4%	3%
Cost of debt, interest	8%	7%	7%	7%	7%	6%
Implied interest		**$215.6**	**$230.3**	**$237.1**	**$308.5**	**$255.3**

Pension and other post-retirement benefits plans

Fundamental analysis - Reported statements

($ in millions)

	2011	2012	2013	2014	2015	2016
Service cost	-	-	-	-	-	-
Interest cost	$10	$9	$9	$10	$9	$7
Expected return on plan assets	$(9)	$(11)	$(13)	$(14)	$(14)	$(10)
Net periodic pension benefit (cost)	**$1**	**$(2)**	**$(4)**	**$(4)**	**$(5)**	**$(3)**

Pension adjustments

Fundamental analysis - Reorganized statements

($ in millions)

	2011	2012	2013	2014	2015	2016
Net periodic pension benefit (cost)	$1	$(2)	$(4)	$(4)	$(5)	$(3)
Less: Service cost	-	-	-	-	-	-
Pension adjustments	**$(1)**	**$2**	**$4**	**$4**	**$5**	**$3**

Appendix 9. Strategic overview options:

Appedenix 10: Transaction information

Sources: Form 8-k, August 7, 2017

Taken directly from the 8-k form:

Balance sheet adjustments

Adjustments for the Merger:

(a.) *Reflects cash consideration paid to Staples' stockholders and equity award holders of $6,766 million based on 656.7 million shares of common stock outstanding and 11.0 million shares underlying outstanding equity awards, consisting of restricted stock units and performance shares as of July 17, 2017, for which $10.25 per share will be paid. Total estimated purchase consideration presented in the table above does not reflect $78 million which represents an estimate of the fair value of Staples' equity awards pertaining to post-merger service, which will be excluded from the purchase price under the acquisition method, and will be expensed in Staples' post-merger financial statements over the various vesting periods, either immediately after the acquisition, or the earlier of the original vesting period, 180 days after the closing of the transaction or 10 months after the closing of the transaction, depending on the terms and conditions of the award. The cash settlement of outstanding equity awards will not have a continuing impact on the Company and, therefore, the compensation expense attributable to post-merger service for these awards has not been reflected in the pro forma condensed consolidated statements of income.*

(b.) *Reflects the historical book value of Staples' net assets as of April 29, 2017. The unaudited pro forma condensed consolidated balance sheet reflects the elimination of Staples' historical common stock, additional paid-in capital, accumulated deficit, treasury stock, and accumulated other comprehensive income as part of acquisition method accounting. In addition, the unaudited pro*

forma condensed consolidated balance sheet reflects the elimination of the historical noncontrolling interest as the related fair value was deemed to be zero.

(c.) *Reflects a $576 million increase in value for Staples' property and equipment balances to an estimated acquisition date fair value of $1,647 million. The fair value estimates for property and equipment are preliminary and were determined based on the assumptions that market participants would use in pricing assets. The final fair value determination for property and equipment may differ from this preliminary determination.*

A 10% increase/decrease in the fair value of property and equipment acquired would decrease/increase the amount of goodwill acquired as part of the Merger by $165 million.

(d.) *Reflects an increase to the book value for Staples' intangible assets balances to their estimated acquisition date fair values. Adjustments to intangible assets that are expected to be recognized in connection with the Merger, consist of the following (in millions):*

Description		
Fair value of tradenames	$	1,758
Fair value of customer relationships		1,318
Total fair value of intangible assets	$	3,076
Less: Historical book value of intangible assets		(170)
Increase in fair value	**$**	**2,906**

The fair value estimates for identifiable intangible assets are preliminary and are based on assumptions that market participants would use in pricing assets. For purposes of the accompanying unaudited pro forma condensed consolidated financial information, it is assumed that all assets will be used in a manner that represents their highest and best use. The final fair value determination for identifiable intangibles may differ from this preliminary determination.

A 10% increase/decrease in the fair value of intangibles assets acquired would decrease/increase the amount of goodwill acquired as part of the Merger by $308 million.

(e.)*Reflects an adjustment to record the fair value associated with favorable and unfavorable lease obligations of $242 million and $121 million, respectively, together with the reversal of previously recorded deferred rent of $45 million. Leases with contractual rents that are greater than current market rents are considered unfavorable leases while leases with contractual rents that are less than current market rents are considered favorable leases. The final fair value determination for lease obligations may differ from this preliminary determination.*

A 10% increase/decrease in the fair value of favorable/unfavorable leases would decrease/increase the amount of goodwill acquired as part of the Merger by $12 million.

(f.)*Reflects the total net deferred income tax liabilities of $1,379 million resulting from the pro forma fair value adjustments for the assets and liabilities to be acquired in the Merger based on Staples' overall corporate blended statutory tax rate of 38%. These estimates are preliminary and adjustments to established deferred tax assets and liabilities could change due to refined determination of statutory rates, in addition to the changes in the estimates of the fair values of assets acquired and liabilities assumed in conjunction with the finalization of the acquisition accounting and the separation effects, could result in changes to these estimates which could be material.*

(g.)*Goodwill is calculated as the difference between the fair value of consideration transferred and the fair values assigned to the identifiable tangible and intangible assets acquired and liabilities assumed. The pro forma adjustment to goodwill is calculated as follows (in millions):*

		As of April 29, 2017
Estimated goodwill related to the Merger	$	2,419
Elimination of Staples' historical goodwill		(1,290)
Pro forma adjustment	**$**	**1,129**

(h.)*The pro forma condensed consolidated balance sheet as of April 29, 2017 reflects a reduction to retained earnings of $106 million related to expected transaction fees and a reduction to cash and cash equivalents related to expenses of $145 million, which was tax-effected resulting in a deferred tax liability of $39 million. As the transaction costs are nonrecurring in nature there was no pro forma adjustment made to the unaudited pro forma condensed consolidated statements of income.*

Adjustments for the Financing:

(i.) *A portion of cash consideration to Staples' stockholders and equity award holders of $6,766 million will be funded by the Financing. The Company expects to enter into the following financing arrangements in connection*

Financing	Principal	Fees		Debt Net of Fees	
New Term Loan Facility	$2,400	$	78	$	2,322
Notes	$1,600	$	36	$	1,564
Bridge Loans(i)	$1,600	$	24	$	1,576
New ABL Credit Facility	$250 drawn of $1,200	$	15	$	250

(i)The Bridge Loan commitments are expected to expire upon issuance of the Notes, and therefore are expected to be undrawn upon closing of the Merger. The $24 million in Bridge Loan fees is assumed in these unaudited pro forma condensed financial statements to be paid and accordingly reduces retained earnings. As the Bridge Loans are nonrecurring there is no interest expense or fees related to the Bridge Loans reflected in the condensed consolidated statements of income.

With the Financing, the Company will receive $4,097 million in cash after paying debt issuance costs of $153 million. Upon closing of the Transactions it is expected that $250 million of the total $1,200 million available under the ABL Facility will be drawn. The $15 million in fees related to the New ABL Credit Facility will be recorded as a deferred financing cost within other assets on the condensed consolidated balance sheet. In total $12 million will be recorded as short-term borrowings and $4,124 million will be recorded as long-term debt.

(j.) *Reflects the redemption of Staples' Existing Notes of which $499 million was recorded as short-term borrowings and $497 million was recorded as long-term debt as of April 29, 2017, as well as the elimination of certain other notes payable in the amount of approximately $3.3 million. As part of the Tender Offer, the Company expects to incur $8 million in premiums and extinguishment costs (assuming 100% of the 2023 Notes are tendered and purchased in the Tender Offer) and pay $2 million of accrued interest on the balance sheet. Following the consummation of the Tender Offer, the Company may, but is not required, to acquire, repay or redeem any 2023 Notes that remain outstanding through open market purchases, privately negotiated transactions, tender offers, redemptions or otherwise, upon such terms and at such prices as the Company may determine.*

(k.) *Reflects the $2,962 million paid in cash by the Sponsor for the Company comprised of both the portion relating to the NAD business of $1,612 and the $1,350 million to be received for the separation of the Retail businesses.*

Adjustments for the Carveout Transactions:

(l.) *Reflects the removal of the historical carrying values of the assets and liabilities of the combined Retail businesses, as reflected in Staples' historical financial statements as of April 29, 2017.*

(m.) *Reflects the removal of the step up in fair value of the assets and liabilities of the combined Retail businesses, resulting from the application of acquisition method accounting for the Merger.*

Description	($ in millions)	
Property and equipment	$	242
Intangible assets		43
Favorable/unfavorable leases(i)		115

(i) Consisting of net favorable lease obligations of $225 million and net unfavorable lease obligations of $110 million.

(n.) *Reflects the removal of $153 million of net deferred tax liabilities resulting from the pro forma fair value adjustments attributable to the assets and liabilities of the combined Retail businesses.*

(o.) *Reflects the removal of $1,350 million of equity which was received to purchase the combined Retail businesses.*

Income statement adjustments:

Adjustments for the Merger:

a.)*Reflects the increased amortization expense associated with the fair value step-up of intangible assets with definite lives, which include our customer relationships. The intangible assets are being amortized using an accelerated amortization method that reflects the economic benefit to the Company. We estimate the useful life of this intangible asset to be 17 years. Our trade name is*

expected to be an indefinite lived intangible asset, hence it is not amortized. Amortization expense over the next five years using the projected cash flow model is as follows (in millions):

Fiscal Years		Year 1		Year 2		Year 3		Year 4		Year 5
Amortization Expense	$	145,237	$	170,026	$	167,627	$	142,566	$	120,938

(b.)*Reflects the increased depreciation expense associated with the fair value step-up of property and equipment. Staples records depreciation expense, on a straight line basis, in both cost of goods sold and occupancy costs and selling, general and administrative expense in its condensed consolidated statements of income. The estimated remaining useful lives of property and equipment range from 2 to 20 years.*

A 10% increase/decrease in the estimated fair values or property and equipment would cause a corresponding increase/decrease in depreciation expense of approximately $8 million for the thirteen weeks ended April 30, 2016 and April 29, 2017 and $34 million for the fiscal year ended January 28, 2017 and the 52 weeks ended April 29, 2017.

(c.)*Reflects an adjustment to cost of goods sold and occupancy costs related to the amortization of the net favorable lease assets over estimated lives ranging from 4 to 5 years.*

A 10% increase/decrease in the estimated fair values of favorable/unfavorable leases would cause a corresponding increase/decrease in amortization expense of approximately $1 million for the thirteen weeks ended April 30, 2016 and April 29, 2017 and $3 million for the fiscal year ended January 28, 2017 and the 52 weeks ended April 29, 2017.

(d.)*Reflects an adjustment to reflect the tax effect of the pro forma adjustments based on Staples' corporate blended statutory tax rate of 38%. Because the tax rate used for these pro forma financial statements is an estimate, it will likely vary from the actual effective rate in periods subsequent to the completion of the transaction.*

Adjustments for the Financing:

(e.) *Reflects the inclusion of interest expense related to the Financings to be entered into in connection with the Merger, as well as the elimination of historical interest expense related to the Existing Notes that are expected to be redeemed or repurchased. The following table shows the pre-tax impact on interest expense (in millions):*

Financing		Anticipated Principal Borrowings(i)	Term (Years)
New Term Loan Facility	$	2,322	7
Notes	$	1,564	8
Bridge Loans(ii)		0	N/A
New ABL Credit Facility(iii)	$	250	5

(i)Reflects allocation of debt as currently anticipated. The actual allocation of the type and amount and the terms of financing may differ from those set forth above.

(ii)The Bridge Loan commitments are expected to expire upon issuance of the Notes, and therefore are expected to be undrawn upon closing of the Merger. Therefore, interest expense has not been reflected in the pro forma condensed consolidated statements of income.

(iii)The New ABL Credit Facility is expected to have $250 million drawn upon the closing of the Transactions with $950 million undrawn. As the amount drawn on the New ABL Credit Facility is expected to be less than 50% of the available capacity, the undrawn portion of the commitments under the New ABL Credit Facility will be subject to an unused commitment fee of 37.5bps per annum.

Financing		Thirteen Weeks Ended April 30, 2016		Fiscal Year Ended January 28, 2017		Thirteen Weeks Ended April 29, 2017		52 Weeks Ended April 29, 2017
Total Interest Expense	$	65	$	264	$	64	$	263
Less: Historical Interest Expense		(10)		(42)		(10)		(42)
Total Additional Interest Expense	**$**	**55**	**$**	**222**	**$**	**54**	**$**	**221**

A 1/8th percent increase in the assumed rates of the variable rate debt instruments, the New Term Loan Facility and drawn portion of the New ABL Credit Facility, would result in a change in aggregate interest expense, including an increase in the New Term Loan Facility interest expense of $3 million for the fiscal year ended January 28, 2017 and $1 million for the thirteen weeks ended April 30, 2016 and April 29, 2017. The increase in interest expense for the drawn portion of the New ABL Facility would be less than $1 million dollars.

***(f.)** Reflects an adjustment to reflect the tax effect of the pro forma adjustment for interest expense based on Staples' corporate blended statutory tax rate of 38%. Because the tax rate used for these pro forma financial statements is an estimate, it will likely vary from the actual effective rate in periods subsequent to the completion of the transaction*

Adjustments for the Carveout Transactions:

***(g.)**Reflects the removal of the historical results of operations of the combined Retail businesses, as reflected in Staples' historical financial statements, for the thirteen weeks ended April 30, 2016 and April 29, 2017, the fiscal year ended January 28, 2017, and the 52 weeks ended April 29, 2017.*

***(h.)**Reflects the removal of the additional depreciation and amortization related to the step up in fair value of the assets and liabilities of the combined Retail businesses resulting from the application of acquisition method accounting for the Merger.*

***(i.)** Reflects the removal of the tax provision recorded by the combined Retail businesses. The stand-alone effective tax rate associated with the combined retail businesses was used to calculate the income tax provision for the combined Retail businesses.*

Adjustments for the Removal of SPS:

***(j.)**Reflects the removal of the historical results of operations of the SPS business unit for the thirteen weeks ended April 30, 2016, the fiscal year ended January 28, 2017, and the 52 weeks ended April 29, 2017. There was no impact on the thirteen weeks ended April 29, 2017 as the SPS business unit was sold on July 5, 2016.*

Appendix 11. LBO model: Financial structure

($ in millions, fiscal year ending January 28)

Financial structure and Fees

Financial structures

	Structure				
	1	**2**	**3**	**4**	**5**
Sources of funds	**Structure 1**	**Structure 2**	**Structure 3**	**Structure 4**	**Status quo**
Revolving credit facility size	$1,200	$1,200	$1,200	$1,200	-
Revolving credit facility draw	250	250	250	250	-
Term loan A	2,400	2,400	2,400	2,400	-
Term loan B	-	-	-	-	-
Term loan C	-	-	-	-	-
2nd Lien	-	-	-	-	-
Senior notes	1,600	1,500	1,500	1,500	-
Senior subordinated notes	-	-	-	-	-
Equity contribution	1,612	1,282	1,712	1,712	-
Proceeds from the carveout transaction	1,350	1,350	1,350	1,350	-
Cash on hand	860	1,290	860	860	-
Total sources of funds	**$8,071.93**	**$8,071.93**	**$8,071.93**	**$8,071.93**	**-**
Uses of funds					
Equity purchase price	$6,766	$6,766	$6,766	$6,766	
Repay existing bank debt	1,008	1,008	1,008	1,008	
Tender / Call premium	-	-	-	-	
Financing fees	153	153	153	153	
Other Fees and expenses	145	145	145	145	
Total uses of funds	**$8,072**	**$8,072**	**$8,072**	**$8,072**	**-**

Purchase price

Public / Private target	1
Offer price per share	$10.25
Fully diluted shares outstanding	667.7
Fair value of Staples' equity awards pertaining to post-merger service	$(78)
Equity purchase price	**$6,766**
Less: Total debt	$1,047
Less: Preferred stock	-
Less: Noncontrolling interest	-
Plus: Redemtion on debt	$39
Plus: Cash and cash equivalents	$860
Enterprise Value	**$8,711.9**

Financing fees

		Fees	
Structure 1	Size	(%)	($)
Revolving credit facility size	$1,200	1.250%	$15
Term loan A	$2,400	3.250%	$78
Term loan B	-	0.000%	-
Term loan C	-	0.000%	-
2nd Lien	-	0.000%	-
Senior notes	$1,600	2.250%	$36
Senior subordinated notes	-	0.000%	-
Senior brigde facility	$1,600	1.500%	$24
Senior subordinated brigde facility	-	0.000%	-
Other financing fees and expenses			-
Total financing fees			**$153**

Amortization of financing fees

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Term	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Revolving credit facility size	5	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0
Term loan A	7	11.1	11.1	11.1	11.1	11.1	11.1	11.1	0.0	0.0	0.0
Term loan B	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Term loan C	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd Lien	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senior notes	7	5.1	5.1	5.1	5.1	5.1	5.1	5.1	0.0	0.0	0.0
Senior subordinated notes	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senior brigde facility	1	24.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Senior subordinated brigde facility	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other financing fees and expenses	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Annual amortization		$43.3	$19.3	$19.3	$19.3	$19.3	$16.3	$16.3	0.0	0.0	0.0

Appendix 12. LBO model: Debt schedule

($ in millions, fiscal year ending January 28)

Debt schedule											
		Projection period									
	Pro forma	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
	2017	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
Forward LIBOR curve, 1-month, yearly ave.	0.00%	2.27%	2.69%	2.80%	2.79%	2.77%	2.78%	2.80%	2.84%	2.89%	2.92%
Std.dev		*2.37%*	*3.08%*	*3.66%*	*4.00%*	*4.20%*	*4.63%*	*4.75%*	*4.86%*	*5.22%*	*5.20%*
Cash flow from operating activities		$482	$492	$509	$528	$549	$571	$587	$590	$596	$603
Cash flow from investing activities		(155)	(155)	(155)	(155)	(155)	(155)	(155)	(155)	(155)	(155)
Cash available for debt repayment		**$327**	**$337**	**$354**	**$373**	**$393**	**$416**	**$432**	**$434**	**$441**	**$448**
Total mandatory repayment	**MinCash**	(24)	(24)	(24)	(24)	(24)	(24)	(24.0)	-	-	-
Cash from balance sheet	**1**	360	-	-	-	-	-	(0)	341	776	1,217
Cash available for optional debt repayment		**$663**	**$313**	**$330**	**$349**	**$369**	**$392**	**$408**	**$776**	**$1,217**	**$1,664**
ABL revolving credit facility											
Revolving credit facility size	$1,200.0										
Spread	3.00%										
LIBOR Floor	1.25%										
Term	5.0										
Commitment fee on unused portion	0.375%										
Beginning balance		$250	-	-	-	-	-	-	-	-	-
Drawdown / (Repayment)		$(250)	-	-	-	-	-	-	-	-	-
Ending balance		-	-	-	-	-	-	-	-	-	-
Interest rate		5.27%	5.69%	5.80%	5.79%	5.77%	5.78%	5.80%	5.84%	5.89%	5.92%
Interest expense		$6.6	-	-	-	-	-	-	-	-	-
Commitment fee	$4.0	$4.0	$4.5	$4.5	$4.5	$4.5	-	-	-	-	-
Administrative agent fee	$0.2	$0.2	$0.2	$0.2	$0.2	$0.2	-	-	-	-	-
Senior secured term loan facility											
Term loan A facility	$2,400.00										
Spread	3.00%										
LIBOR Floor	1.25%										
Term	7.0										
Repayment schedule	1.0%	Per annum, bullet at maturity									
Beginning balance		$2,400	$1,963	$1,627	$1,273	$900	$507	$90	-	-	-
Mandatory repayment		$(24)	$(24)	$(24)	$(24)	$(24)	$(24)	(24.0)	-	-	-
Optional repayment		$(413)	$(313)	$(330)	$(349)	$(369)	$(392)	$(66)	-	-	-
Ending balance	**$2,400**	**$1,963**	**$1,627**	**$1,273**	**$900**	**$507**	**$90**	-	-	-	-
Interest rate		5.27%	5.69%	5.80%	5.79%	5.77%	5.78%	5.80%	5.84%	5.89%	5.92%
Interest expense	$126.6	$115.0	$102.1	$84.1	$62.9	$40.6	$17.2	$2.6	-	-	-
Senior notes											
Size	1,600.0										
Coupon	7.36%										
Term	7										
Beginning balance		$1,600	$1,600	$1,600	$1,600	$1,600	$1,600	$1,600	$1,600	$1,600	$1,600
Repayment		-	-	-	-	-	-	-	-	-	-
Ending balance		**$1,600**	**$1,600**	**$1,600**	**$1,600**	**$1,600**	**$1,600**	**$1,600**	**$1,600**	**$1,600**	**$1,600**
Interest expense	$118	$118	$118	$118	$118	$118	$118	$118	$118	$118	$118

Appendix 13. LBO model: PPE schedule

($ in millions, fiscal year ending January 28)

PPE & Depreciation schedule

	Projection period									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
PPE, beginning of year	$893	$988	$1,068	$1,132	$1,180	$1,213	$1,231	$1,233	$1,219	$1,190
CAPEX, beginning of year	155	155	155	155	155	155	155	155	155	155
Straight-line depreciation										
Years (PP&E)	20.0									
Years (CAPEX)	10	10	10	10	10	10	10	10	10	10
Existing PP&E	$44.7	$44.7	$44.7	$44.7	$44.7	$44.7	$44.7	$44.7	$44.7	$44.7
2018 CAPEX	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
2019 CAPEX		15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
2020 CAPEX			15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
2021 CAPEX				15.5	15.5	15.5	15.5	15.5	15.5	15.5
2022 CAPEX					15.5	15.5	15.5	15.5	15.5	15.5
2023 CAPEX						15.5	15.5	15.5	15.5	15.5
2024 CAPEX							15.5	15.5	15.5	15.5
2025 CAPEX								15.5	15.5	15.5
2026 CAPEX									15.5	15.5
2027 CAPEX										15.5
Less: Total straight-line depreciation	(60)	(76)	(91)	(107)	(122)	(138)	(153)	(169)	(184)	(200)
Plus: CAPEX	155	155	155	155	155	155	155	155	155	155
PPE, end of year	$988	$1,068	$1,132	$1,180	$1,213	$1,231	$1,233	$1,219	$1,190	$1,145

PPE & Depreciation schedule assumptions

Years (PPE)	20
Years (CAPEX)	10

Appendix 14. Sensitivity analysis – (Implied share price) Exit multiple and exit year

Implied share price - Assuming 6.3x Entry multiple: Scenario 1). Base

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Exit multiple	**6.00x**	$4.23	$4.74	$5.27	$5.83	$6.42	$7.04	$7.68	$8.34	$9.00	$9.67
	6.25x	$4.55	$5.05	$5.58	$6.14	$6.73	$7.35	$8.00	$8.65	$9.31	$9.98
	6.50x	$4.86	$5.37	$5.90	$6.46	$7.04	$7.67	$8.31	$8.96	$9.63	$10.30
	6.75x	$5.18	$5.68	$6.21	$6.77	$7.36	$7.98	$8.63	$9.28	$9.94	$10.61
	7.00x	$5.49	$6.00	$6.53	$7.08	$7.67	$8.30	$8.94	$9.59	$10.25	$10.92
	7.25x	$5.81	$6.31	$6.84	$7.40	$7.99	$8.61	$9.26	$9.91	$10.57	$11.24

Implied share price - Assuming 6.3x Entry multiple: Scenario 2). Business improvement

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Exit multiple	**6.00x**	$6.00	$6.74	$7.54	$9.44	$10.37	$11.35	$12.32	$13.28	$14.27	$15.28
	6.25x	$6.39	$7.14	$7.94	$9.88	$10.82	$11.80	$12.77	$13.74	$14.73	$15.74
	6.50x	$6.77	$7.53	$8.34	$10.33	$11.27	$12.26	$13.23	$14.20	$15.19	$16.20
	6.75x	$7.16	$7.93	$8.75	$10.78	$11.72	$12.71	$13.69	$14.66	$15.65	$16.67
	7.00x	$7.54	$8.32	$9.15	$11.22	$12.17	$13.17	$14.15	$15.12	$16.12	$17.13
	7.25x	$7.93	$8.71	$9.55	$11.67	$12.62	$13.63	$14.61	$15.58	$16.58	$17.60

Implied share price - Assuming 6.3x Entry multiple: Scenario 3). Business downturn

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Exit multiple	**6.00x**	$3.85	$4.24	$4.66	$4.64	$5.09	$5.56	$6.09	$6.63	$7.19	$7.75
	6.25x	$4.15	$4.54	$4.95	$4.92	$5.36	$5.83	$6.36	$6.91	$7.46	$8.02
	6.50x	$4.45	$4.84	$5.25	$5.19	$5.64	$6.11	$6.64	$7.18	$7.73	$8.29
	6.75x	$4.75	$5.13	$5.54	$5.47	$5.91	$6.38	$6.91	$7.45	$8.00	$8.56
	7.00x	$5.05	$5.43	$5.83	$5.74	$6.18	$6.65	$7.18	$7.72	$8.27	$8.83
	7.25x	$5.35	$5.73	$6.13	$6.01	$6.45	$6.92	$7.45	$7.99	$8.54	$9.10

Implied share price - Assuming 6.3x Entry multiple: Scenario 4). Management

		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Exit multiple	**6.00x**	$5.95	$6.55	$7.37	$8.29	$9.23	$10.22	$11.26	$12.34	$13.45	$14.59
	6.25x	$6.33	$6.92	$7.75	$8.67	$9.61	$10.61	$11.66	$12.74	$13.86	$15.01
	6.50x	$6.71	$7.29	$8.12	$9.04	$10.00	$11.00	$12.05	$13.14	$14.27	$15.43
	6.75x	$7.09	$7.67	$8.49	$9.42	$10.38	$11.39	$12.45	$13.55	$14.68	$15.84
	7.00x	$7.47	$8.04	$8.87	$9.80	$10.76	$11.78	$12.84	$13.95	$15.09	$16.26
	7.25x	$7.84	$8.41	$9.24	$10.18	$11.14	$12.17	$13.24	$14.35	$15.50	$16.68

Appendix 15. Sensitivity analysis – (IRR) acquisition price and exit multiple

IRR - Assumming 6.3x Entry multiple: Exit year 2024: Scenario 1). Base													
	Acquisition price												
	$9.00	$9.25	$9.50	$9.75	$10.00	$10.25	$10.50	$10.75	$11.00	$11.25	$11.50	$11.75	$12.00
4.00x	23.73%	20.34%	17.57%	15.25%	13.24%	11.49%	9.93%	8.53%	7.26%	6.10%	5.04%	4.05%	3.14%
4.50x	25.78%	22.33%	19.52%	17.15%	15.12%	13.33%	11.75%	10.33%	9.04%	7.86%	6.78%	5.77%	4.84%
5.00x	27.64%	24.14%	21.29%	18.89%	16.82%	15.01%	13.41%	11.96%	10.65%	9.46%	8.36%	7.34%	6.40%
5.50x	29.36%	25.81%	22.92%	20.49%	18.39%	16.56%	14.93%	13.47%	12.14%	10.93%	9.81%	8.78%	7.82%
6.00x	30.95%	27.36%	24.43%	21.97%	19.85%	17.99%	16.34%	14.86%	13.52%	12.29%	11.16%	10.12%	9.15%
6.50x	32.43%	28.80%	25.84%	23.34%	21.20%	19.32%	17.65%	16.16%	14.80%	13.56%	12.42%	11.36%	10.38%
7.00x	33.81%	30.14%	27.15%	24.64%	22.47%	20.57%	18.89%	17.37%	16.00%	14.75%	13.59%	12.53%	11.54%
7.50x	35.12%	31.41%	28.39%	25.85%	23.66%	21.75%	20.05%	18.52%	17.13%	15.87%	14.70%	13.63%	12.63%
8.00x	36.35%	32.61%	29.57%	27.00%	24.79%	22.86%	21.14%	19.60%	18.20%	16.93%	15.75%	14.66%	13.65%
8.50x	37.52%	33.75%	30.68%	28.09%	25.87%	23.91%	22.18%	20.63%	19.22%	17.93%	16.74%	15.65%	14.63%
9.00x	38.64%	34.84%	31.74%	29.13%	26.88%	24.92%	23.17%	21.60%	20.18%	18.88%	17.69%	16.59%	15.56%
9.50x	39.70%	35.87%	32.75%	30.12%	27.86%	25.88%	24.12%	22.54%	21.10%	19.80%	18.59%	17.48%	16.44%
10.00x	40.71%	36.86%	33.71%	31.07%	28.79%	26.79%	25.02%	23.43%	21.98%	20.67%	19.45%	18.33%	17.29%

IRR - Assumming 6.3x Entry multiple: Exit year 2024: Scenario 2). Business improvement													
	Acquisition price												
	$9.00	$9.25	$9.50	$9.75	$10.00	$10.25	$10.50	$10.75	$11.00	$11.25	$11.50	$11.75	$12.00
4.00x	33.19%	29.54%	26.56%	24.05%	21.90%	20.01%	18.33%	16.83%	15.46%	14.21%	13.06%	12.00%	11.02%
4.50x	35.11%	31.41%	28.39%	25.85%	23.66%	21.75%	20.04%	18.52%	17.13%	15.86%	14.70%	13.62%	12.62%
5.00x	36.89%	33.14%	30.08%	27.50%	25.29%	23.34%	21.62%	20.07%	18.67%	17.39%	16.21%	15.12%	14.10%
5.50x	38.54%	34.74%	31.64%	29.04%	26.79%	24.83%	23.08%	21.52%	20.10%	18.80%	17.60%	16.50%	15.48%
6.00x	40.07%	36.23%	33.10%	30.47%	28.20%	26.21%	24.45%	22.86%	21.43%	20.12%	18.91%	17.79%	16.76%
6.50x	41.52%	37.64%	34.47%	31.81%	29.52%	27.51%	25.73%	24.13%	22.68%	21.35%	20.13%	19.01%	17.96%
7.00x	42.87%	38.96%	35.76%	33.08%	30.76%	28.74%	26.94%	25.32%	23.86%	22.52%	21.29%	20.15%	19.09%
7.50x	44.16%	40.21%	36.99%	34.27%	31.94%	29.90%	28.08%	26.45%	24.97%	23.62%	22.38%	21.23%	20.16%
8.00x	45.38%	41.40%	38.14%	35.41%	33.06%	30.99%	29.16%	27.52%	26.03%	24.67%	23.41%	22.26%	21.18%
8.50x	46.54%	42.52%	39.25%	36.49%	34.12%	32.04%	30.20%	28.54%	27.04%	25.66%	24.40%	23.23%	22.15%
9.00x	47.65%	43.60%	40.30%	37.53%	35.13%	33.04%	31.18%	29.51%	28.00%	26.61%	25.34%	24.17%	23.07%
9.50x	48.71%	44.64%	41.31%	38.51%	36.11%	34.00%	32.12%	30.44%	28.92%	27.52%	26.24%	25.06%	23.96%
10.00x	49.73%	45.63%	42.28%	39.46%	37.04%	34.91%	33.03%	31.33%	29.80%	28.40%	27.11%	25.91%	24.80%

IRR - Assumming 6.3x Entry multiple: Exit year 2024: Scenario 3). Business downturn													
	Acquisition price												
	$9.00	$9.25	$9.50	$9.75	$10.00	$10.25	$10.50	$10.75	$11.00	$11.25	$11.50	$11.75	$12.00
4.00x	18.95%	15.69%	13.03%	10.79%	8.86%	7.18%	5.68%	4.33%	3.11%	2.00%	0.98%	0.03%	-0.85%
4.50x	21.17%	17.85%	15.14%	12.86%	10.90%	9.18%	7.65%	6.28%	5.04%	3.91%	2.86%	1.90%	1.00%
5.00x	23.17%	19.80%	17.04%	14.73%	12.73%	10.99%	9.43%	8.04%	6.78%	5.62%	4.56%	3.58%	2.67%
5.50x	25.00%	21.57%	18.78%	16.43%	14.40%	12.63%	11.06%	9.64%	8.36%	7.19%	6.11%	5.12%	4.19%
6.00x	26.68%	23.20%	20.37%	17.99%	15.94%	14.14%	12.55%	11.11%	9.81%	8.63%	7.54%	6.53%	5.59%
6.50x	28.23%	24.72%	21.85%	19.44%	17.36%	15.54%	13.93%	12.48%	11.16%	9.96%	8.86%	7.83%	6.88%
7.00x	29.68%	26.12%	23.22%	20.79%	18.69%	16.85%	15.21%	13.75%	12.42%	11.20%	10.09%	9.05%	8.09%
7.50x	31.04%	27.44%	24.51%	22.05%	19.93%	18.07%	16.42%	14.94%	13.59%	12.37%	11.24%	10.19%	9.22%
8.00x	32.31%	28.69%	25.73%	23.24%	21.10%	19.22%	17.56%	16.06%	14.70%	13.46%	12.32%	11.27%	10.29%
8.50x	33.52%	29.86%	26.88%	24.37%	22.20%	20.31%	18.63%	17.12%	15.75%	14.50%	13.35%	12.28%	11.30%
9.00x	34.67%	30.98%	27.97%	25.43%	23.25%	21.34%	19.65%	18.12%	16.74%	15.48%	14.32%	13.25%	12.25%
9.50x	35.76%	32.04%	29.00%	26.45%	24.25%	22.33%	20.62%	19.08%	17.69%	16.42%	15.25%	14.17%	13.16%
10.00x	36.80%	33.05%	29.99%	27.42%	25.20%	23.26%	21.54%	19.99%	18.59%	17.31%	16.13%	15.04%	14.03%

IRR - Assumming 6.3x Entry multiple: Exit year 2024: Scenario 4). Management													
	Acquisition price												
	$9.00	$9.25	$9.50	$9.75	$10.00	$10.25	$10.50	$10.75	$11.00	$11.25	$11.50	$11.75	$12.00
4.00x	31.94%	28.33%	25.38%	22.89%	20.76%	18.89%	17.22%	15.73%	14.38%	13.14%	12.01%	10.96%	9.98%
4.50x	33.71%	30.04%	27.05%	24.54%	22.37%	20.48%	18.79%	17.28%	15.91%	14.66%	13.50%	12.44%	11.45%
5.00x	35.34%	31.63%	28.61%	26.06%	23.87%	21.95%	20.24%	18.71%	17.33%	16.06%	14.89%	13.81%	12.81%
5.50x	36.86%	33.11%	30.05%	27.48%	25.26%	23.32%	21.60%	20.05%	18.65%	17.36%	16.19%	15.10%	14.08%
6.00x	38.29%	34.50%	31.41%	28.81%	26.57%	24.61%	22.87%	21.30%	19.89%	18.59%	17.40%	16.30%	15.27%
6.50x	39.64%	35.81%	32.69%	30.06%	27.80%	25.82%	24.06%	22.48%	21.05%	19.74%	18.54%	17.43%	16.39%
7.00x	40.91%	37.05%	33.90%	31.25%	28.97%	26.97%	25.19%	23.60%	22.15%	20.83%	19.62%	18.50%	17.45%
7.50x	42.12%	38.22%	35.04%	32.37%	30.07%	28.05%	26.26%	24.66%	23.20%	21.87%	20.64%	19.51%	18.46%
8.00x	43.26%	39.34%	36.13%	33.44%	31.12%	29.09%	27.28%	25.66%	24.19%	22.85%	21.62%	20.48%	19.42%
8.50x	44.36%	40.40%	37.18%	34.46%	32.12%	30.08%	28.26%	26.62%	25.14%	23.79%	22.55%	21.40%	20.33%
9.00x	45.41%	41.42%	38.17%	35.44%	33.08%	31.02%	29.19%	27.54%	26.05%	24.69%	23.44%	22.28%	21.20%
9.50x	46.41%	42.40%	39.13%	36.37%	34.00%	31.92%	30.08%	28.42%	26.92%	25.55%	24.29%	23.12%	22.04%
10.00x	47.38%	43.34%	40.04%	37.27%	34.88%	32.79%	30.94%	29.27%	27.76%	26.38%	25.11%	23.93%	22.84%

Appendix 16. Sensitivity analysis – (IRR) Exit year and exit multiple

IRR - Assuming 6.3x Entry multiple: Scenario 1). Base

	Exit year									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
4.0x	(28.9%)	(4.1%)	4.5%	8.2%	10.1%	11.0%	11.5%	11.6%	11.6%	11.5%
4.5x	(2.8%)	8.7%	11.9%	13.0%	13.4%	13.4%	13.3%	13.1%	12.7%	12.4%
5.0x	23.2%	20.1%	18.4%	17.3%	16.4%	15.7%	15.0%	14.4%	13.8%	13.3%
5.5x	49.3%	30.5%	24.3%	21.1%	19.1%	17.7%	16.6%	15.6%	14.8%	14.1%
6.0x	75.4%	40.1%	29.7%	24.6%	21.6%	19.5%	18.0%	16.8%	15.7%	14.9%
6.5x	101.4%	49.1%	34.7%	27.9%	23.9%	21.2%	19.3%	17.8%	16.6%	15.6%
7.0x	127.5%	57.6%	39.3%	30.9%	26.0%	22.8%	20.6%	18.8%	17.4%	16.3%
7.5x	153.5%	65.7%	43.6%	33.7%	28.0%	24.3%	21.7%	19.8%	18.2%	16.9%
8.0x	179.6%	73.3%	47.7%	36.3%	29.9%	25.8%	22.9%	20.7%	19.0%	17.6%

IRR - Assuming 6.3x Entry multiple: Scenario 2). Business improvement

	Exit year									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
4.0x	20.5%	22.0%	21.5%	24.8%	22.9%	21.3%	20.0%	18.8%	17.8%	17.0%
4.5x	52.5%	34.7%	28.6%	29.3%	26.0%	23.6%	21.7%	20.2%	18.9%	17.9%
5.0x	84.5%	46.3%	35.0%	33.4%	28.8%	25.7%	23.3%	21.5%	20.0%	18.7%
5.5x	116.5%	57.1%	40.8%	37.2%	31.4%	27.6%	24.8%	22.6%	20.9%	19.5%
6.0x	148.5%	67.1%	46.2%	40.6%	33.8%	29.4%	26.2%	23.8%	21.8%	20.3%
6.5x	180.5%	76.6%	51.2%	43.8%	36.1%	31.1%	27.5%	24.8%	22.7%	21.0%
7.0x	212.5%	85.6%	55.9%	46.8%	38.2%	32.7%	28.7%	25.8%	23.5%	21.6%
7.5x	244.5%	94.2%	60.3%	49.7%	40.2%	34.2%	29.9%	26.7%	24.3%	22.3%
8.0x	276.5%	102.5%	64.5%	52.4%	42.1%	35.6%	31.0%	27.6%	25.0%	22.9%

IRR - Assuming 6.3x Entry multiple: Scenario 3). Business downturn

	Exit year									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
6.0x	59.3%	32.6%	24.5%	17.8%	16.1%	14.9%	14.1%	13.5%	12.9%	12.4%
6.5x	84.2%	41.6%	29.5%	21.1%	18.5%	16.7%	15.5%	14.6%	13.8%	13.1%
7.0x	109.0%	50.0%	34.2%	24.2%	20.7%	18.4%	16.8%	15.6%	14.7%	13.8%
7.5x	133.9%	58.0%	38.6%	27.0%	22.7%	20.0%	18.1%	16.6%	15.5%	14.5%
8.0x	158.7%	65.6%	42.7%	29.7%	24.7%	21.4%	19.2%	17.6%	16.2%	15.2%
8.5x	183.6%	72.9%	46.6%	32.3%	26.5%	22.8%	20.3%	18.4%	17.0%	15.8%
9.0x	208.4%	79.8%	50.2%	34.6%	28.2%	24.1%	21.3%	19.3%	17.7%	16.4%
9.5x	233.3%	86.5%	53.8%	36.9%	29.8%	25.3%	22.3%	20.1%	18.3%	16.9%
10.0x	258.1%	93.0%	57.1%	39.1%	31.4%	26.5%	23.3%	20.8%	19.0%	17.5%

IRR - Assuming 6.3x Entry multiple: Scenario 4). Management

	Exit year									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
4.0x	21.2%	21.7%	22.0%	21.6%	20.7%	19.8%	18.9%	18.1%	17.3%	16.6%
4.5x	52.5%	33.8%	28.6%	25.7%	23.5%	21.8%	20.5%	19.3%	18.3%	17.5%
5.0x	83.9%	44.8%	34.5%	29.5%	26.1%	23.8%	21.9%	20.5%	19.3%	18.3%
5.5x	115.2%	55.1%	40.0%	32.9%	28.5%	25.5%	23.3%	21.6%	20.2%	19.0%
6.0x	146.6%	64.7%	45.1%	36.1%	30.8%	27.2%	24.6%	22.6%	21.0%	19.7%
6.5x	177.9%	73.8%	49.8%	39.1%	32.9%	28.8%	25.8%	23.6%	21.8%	20.4%
7.0x	209.3%	82.5%	54.3%	41.9%	34.8%	30.2%	27.0%	24.5%	22.6%	21.0%
7.5x	240.6%	90.7%	58.5%	44.6%	36.7%	31.6%	28.1%	25.4%	23.3%	21.6%
8.0x	272.0%	98.6%	62.5%	47.1%	38.5%	32.9%	29.1%	26.2%	24.0%	22.2%