



UNIVERSITAS INDONESIA

**AN ACQUISITIONS OF A COMPANY USING
LEVERAGED BUYOUTS
(A CASE STUDY OF PT XYZ)**

TESIS

Diajukan sebagai salah satu syarat untuk memperoleh gelar
Magister Manajemen

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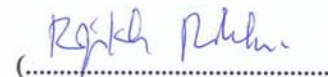
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Jakarta, June 2010

M. Indra Arisandie



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ABSTRACT

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Title : An Acquisition of a Company Using Leverage Buy Out (A Case Study of PT XYZ)

Companies conduct their business expansion in various ways. Some of these ways are to invest directly in real investment, invest in financial assets, or acquire other companies. In this thesis, it is discussed how PT XYZ considers to acquire of PT ABCD using leverage buy out as an alternative for its business expansion. Using Pre LBO Model up to Post LBO Model of Rosenbaum dan Pearl, the analysis PT ABCD' acquisition with LBO is conducted at the point that its IRR and NPV at exit is found. The results of the analysis are that PT ABCD provides an IRR of 20% plus at the exit year 5 and that its NPV is also positive. From this analysis it can be concluded that the acquisition analysis using LBO Model Rosenbaum dan Pearl can be implemented properly and accordingly it can be recommended to be used by companies which would like to expand its business using acquisition.

Key words: acquisition, leverage buy out, IRR at Exit.

ABSTRAK

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Perusahaan dapat melakukan ekspansi bisnisnya dalam beberapa cara. Beberapa diantaranya adalah melakukan investasi langsung, melakukan investasi dalam aset finansial, atau mengambil alih perusahaan. Dalam tesis ini dibahas bagaimana PT XYZ mempertimbangkan untuk mengakuisisi PT ABCD dengan mempergunakan leverage buy out sebagai alternatif untuk ekspansi bisnisnya. Dengan mempergunakan pendekatan mulai dari Pre LBO Model hingga Post LBO Model Rosenbaum dan Pearl, dilakukan analisis akuisisi dengan LBO sehingga diperoleh nilai IRR dan NPV at exit. Hasil analisisnya menunjukkan bahwa PT ABCD memberikan IRR di atas nilai IRR 20% plus pada tahun exit ke 5 dan nilai NPV yang juga positif. Dari analisis ini dapat disimpulkan bahwa pendekatan Analisis Akuisisi dengan LBO Model Rosenbaum dan Pearl dapat diterapkan dengan baik dan karenanya disarankan untuk digunakan oleh perusahaan yang akan melakukan ekspansi bisnis dengan akuisisi.

Kata Kunci: acquisition, leverage buy out, IRR at Exit.

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CHAPTER 1

AN INTRODUCTION

1.1 Background of Problem

Companies can conduct their business expansion in various ways. Some of these ways are to invest directly in real investment, invest in financial investments, or acquire other companies. In direct real investment, a company sets up a new company after conducting a feasibility analysis (feasibility study) on the business that will be run in the future. In the feasibility analysis, a company's managers analyze several aspects, ranging from the legal aspects, social economic aspects, environmental aspects, including of financial analysis aspects, or commonly known as capital budgeting analysis.

Company's expansion using financial investment is conducted when a company buys shares of the target company. If the company becomes a dominant shareholder, such as it owns shares for at least 51% of the target company, the company then practically expands its business in the target company. Manager of the acquiring acompany by purchasing shares of the target company needs to carry out feasibility analysis the same as a feasibility analysis of the company which invests in real investment. Manager of the company, who will purchase financial investment, must conduct a financial analysis in the share investment of the target company. If the value of the company's target share is lower than its instrinsic value, then this company is a good candidate to be purchased.

In an acquisition or purchasing of a company, the acquiring company may finance its acquisition using its own capital, or using debt financing, or a combination between capital and debt financing. According to Olsen (2003) a leverage buyout (LBO) is an acquisition of a company or a division of a company using a certain amount of debt financing. If an acquiring company uses debt to finance its acquisition, then the company has implemented a leveraged buyout. A company's expansion using acquisition which is financed by LBO also needs a financial analysis the same as the purchasing share analysis which is financed by its own capital. If the value of a target company acquired by LBO is higher than the value of the acquisitions, then the acquisition by LBO is an attractive alternative to expansion to be evaluated.

According to Olsen (2003) from the company's manager perspective, LBO has some interesting characteristics, namely:

- a. Tax benefits associated with the use of debt financing.
- b. Freedom to determine the target company from public companies which would be acquired.
- c. Ability of the company to take advantage of its liquidity without sacrificing the involvement of the company's daily operations.
- d. Opportunity for the managers to become owners for a large proportion of the target company's equity.

According to Rosenbaum and Pearl (2009) in a successful LBO transaction, shareholders (equity holders) of the acquiring companies often receive a yield (return) which is very high, because the debt holders have obtained a fixed yield, while equity holders receive all the benefits of any residual profits. Accordingly, acquiring companies using LBO seek target companies that can produce a large return. An LBO funds generally try to seek return of an LBO within a time limit of three to five years before the company completes the acquisition with an exit strategy (Rosenbaum and Pearl, 2009). The exit strategy, among others, is to sell the company, or perform public offering, or recapitalization.

LBO transactions in Indonesia, mostly happened in late 1990 and in the early 2000. Some of these LBO transactions based on the regulation of the Arsitektur Perbankan Indonesia (API) such as the occurrence of mergers acquisitions in the banking sector. Some banks do merged acquisitions because of the minimum capital policy, so if a bank merged with another bank, limits of the minimum capital required in the API can be met.

Here's a few evidence that's shows a merger and acquisitions of banks that happened in Indonesia around the late 1990's and early 2000, that will be shown table 1.1

Table 1.1 List of Acquisitions and Mergers Banks in Indonesia in the late 1990 and early 2000.

Daftar Akuisisi dan Merger Bank di Indonesia		
Nama Bank	Merger / Akuisisi	Kepemilikan saham %
Konsorsium Wishart	Bank Anglomas Intl	90.0%
Hana Bank + IFC	Bank Bintang Manunggal	61.0%
Triputra Persada R	Bank Purba Danarta	81.5%
Kharisma Putra K	Bank Ina Perdana	55.0%
Dian Intan Pertiwi	Bank Finconesia	51.0%
Bank Victoria	Bank Swaguna	99.8%
Rabobank	Bank Haga & Hagakita	-
BoTM-UFJ+Acom	Bank Nusantara P	75.4%
Bank Commonwealth	Bank Arta Niaga K	80.0%
BRI	Bank Jasa Arta	100.0%
Bank of India	Bank Swadesi	90.0%
ICBC	Bank Halim	90.0%
Bank Index Selindo	Bank Harmon	-
Bank Multicor	Bank Windu Kentjana	-
Bank Panin	Bank Harfa	100.0%
Bank Mandiri	Bank Sinar H (Bali)	80.0%
Mercy Corps	Bank Sri Partha	-

Source: <http://buletinbisnis.wordpress.com/2007/12/11/daftar-akuisisi-dan-merger-bank-di-indonesia/>

Several other banks also make merger acquisition transactions in a consideration to obtain a better assets and liabilities structure. A bank that has a dominant long-term funding structure also with a dominant short-term assets structure, surely will be a merger acquisition target to other banks that have a dominant long-term asset structure and dominant liability of a short-term structure. Banks that want to do mergers acquisitions can also finance these acquisitions by seeking funding by LBO.

Companies that do mergers acquisitions outside the banking sector can also do merger acquisitions with the LBO as an alternative to expand its company. Even more to companies that don't or haven't got a strict regulations yet, companies can expand to become a corporate conglomerate by acquiring other companies in different economic sectors. By doing an LBO

analysis it will be very interesting to know which companies are able to be an LBO acquisition target and how to conduct such analysis. In this context PT XYZ which is known as one of many oil producers in the world and has a branch in Jakarta seeks to expand its business by considering to acquiring companies in the same business sector. Management of the PT XYZ considers that an expansion using acquisition would even provide a bigger challenge and accordingly high return at the time they intend to exit within the next five years as compared to an expansion in traditional manner or through real investment. Several other reasons why PT XYZ uses acquisition as their expansion strategy are that, first, acquisition provides a quick yield in investment as compared to traditional expansion which the company must find build plant, produce product, and market the product. Secondly, Management PT XYZ can analyze their target company effectively, if the target company does not provide enough return then they can find other target company as their candidate of the acquisition. This strategy can not be implemented when PT XYZ do invest in traditional expansion such as building a plant. Thirdly, Management of PT XYZ can exit at any year of investment in target company when they have received target yield.

Management of PT XYZ would limit its target acquisition companies as the companies in the automotive Industry as they feel that they have some considerable experience in this industry and that total value of equity of its target companies should be less than Rp. 250 billions. Management of PT XYZ considers PT ABCD as its target of the acquisition. One of the reason that PT ABCD is suitable as the target acquisition is that PT ABCD is the the automotive industry that has positive free cash flow and proper return. Accordingly PT ABCD is considered as a good investment alternative for expansion. The problem then is whether PT ABCD is indeed a good company for the target acquisition of PT XYZ and how to analyze this acquisition so that the management of PT XYZ has proper analysis for basing their decision to acquire PT ABCD.

1.2 Problem Statement and Research Questions

Based on the above background, the problem statement which will be analyzed in this thesis is how LBO analysis is carried out in order that acquisition transactions can provide a high return for the PT XYZ as the acquiring company. With the above problem statement, the research questions posed are as follows:

- a. Of the companies in the automotive industry sector, does PT ABCD provide strong reasons as a target company to acquire?

- b. If firm does an LBO acquisition, what analyses are necessary to be conducted by PT XYZ in its acquisition methodology?
- c. Is the return from the acquisition transaction by an LBO is large enough so that acquiring a firm by an LBO has become an alternative investments or a profitable business expansion?

To answer the above research questions and problem statements, an analysis will be conducted for PT ABCD which is one of the companies in an automotive industry sector that is listed in the Indonesia Stock Exchange.

1.3 Research Objectives

Based on the problem statement and research questions outlined above, the research objectives can be stated as follows:

- a. The purpose of the analysis from the first research question is to conduct a theoretical review of the reasons for selecting a company in the acquisition by LBO.
- b. The objective of the second research question is to determine what kind of analysis that should be done by PT XYZ to acquire PT ABCD using an LBO financing.
- c. The objective of the third research question is to compare the possible return on investment on the target companies that would be acquired by LBO, before PT XYZ implements an exit strategy. With the calculation of internal rate return and net present value of the LBO acquisition, it can be analyzed whether the investment using an LBO acquisitions is enough profitable or not.

The entire analysis above is expected to provide a solution to the problem of how the LBO analysis is conducted so that an LBO transaction can provide a high return for PT XYZ.

1.4 Problem Limitation

The analysis of an LBO acquisition is carried out using the following limitations:

- a. Data used in this thesis are collected from PT ABCD which is listed on the Indonesia Stock Exchange. The reason for selecting a company in the automotive Industry is that PT XYZ is in the oil business and it intends to expand its business in the companies that are related with its core business. From the companies in the Automotive Industry, PT ABCD is listed in the Indonesia Stock Exchange. PT ABCD is chosen as a target of the acquisition due to its high

sales growth and high rate of returns (based on 2006 up to 2009 data). A High-return is one of the factors that are considered by PT XYZ in determining the target company when acquiring a company. The book value of equity of the target company should be limited not to exceed Rp 250 billion as at the end of 2009. This limitation is related to the funds needed for the acquisition provided by PT XYZ and the leverage financing.

- b. The LBO analysis is based on the analysis of the target companies' financial statement of 2006, 2007, 2008, and 2009. The reason for selecting these horizon time is that, first, for predicting the next year growth, such as sales growth, it is needed four years data in order to get three figures of sales growth. Secondly, once the three figures of growth rate are found, it can be calculated its average growth rate which is then to be used as the first assumption on the prediction of 2010 up to 2014 growth rate of sales and other income statement figures. For prediction scenario analysis it will be used other assumptions based on the other three figures of growth rate, namely the growth rate of sales in 2009, 2008, and 2007 as the second, third, and fourth assumptions respectively.
- c. The management of PT XYZ has determined that it will exit from the acquisition and sell the target by at the end of year 5 (based on the information given by the Management). This fifth year of exit strategy is considered enough for providing a positive return of 20% plus.
- d. In an LBO acquisition analysis, there are a lot of aspects that need to be evaluated. Among these are the legal, social and economic, financial, and environmental aspects which might have impacts on the analysis of the company being acquired. In this thesis, the analysis is restricted to financial analysis aspects of the LBO acquisition.

1.5 Benefits of Research

The benefits of this research is intended to provide answers to the research questions whether company's expansion by acquisition using leverage provides high returns. Therefore, this research is expected to contribute or provide the following benefits:

- a. Management of PT XYZ may use this analysis as a basis their evaluation when they acquire target companies using LBO.
- b. Investors who identify that there will be an acquisition of a target company may use this analysis as a basis for their investment valuation. The investors may determine whether the acquisition is profitable and accordingly they can invest in the acquiring company's stocks.

- c. For students, this analysis provides an example of how an LBO analysis process is carried out so that by understanding this analysis, students can apply it in practice when they are in a working world.

1.6 Research Methods

For the purpose of the acquisition using an LBO, some literature researches will be conducted. After reviewing the literatures, data on the company's financial statements from the target company is collected and reviewed. Company's financial statement data are then processed to obtain its enterprise value and their projected Internal Rate Return (IRR). The IRR analysis along with the enterprise value analysis of the targeted company are measured as set out in the literature. Hence, the research method is a quantitative financial analysis in its nature.

1.7 Theoretical Framework

Acquiring of a company, in financial management can be viewed as a form of investment. The acquisition is considered successful if as with any other investment decisions, provides a higher return than the expected return. As with the investment decision, the decision to acquire a company needs a financial analysis aspects so that the acquiring decisions required for the financial analysis quantitatively can be determined whether the acquisition is feasible or reasonable.

As in the investment decision, acquiring companies may fund their acquisitions with debt or equity or a combination of both. Funding acquisition by debt or commonly known as LBO, is one of the alternative funding that is interesting to be considered. To analyze an LBO acquisition, an enterprise value of the target company will be measured. As long as the present value of the enterprise value of the target company is bigger than the initial investment value or alternatively that the IRR of the target company is quite high or bigger than its cost of capital then the business expansion by an LBO acquisition is warranted to be implemented.

1.8 Systematic of Thesis Writing

The systematic of this thesis writing is organized into five chapters as follows:

Chapter 1: Introduction

In this chapter it will be described the background of the problem, problem statement, research objectives, problem limitation, benefits of the research, research methods, and the systematic of thesis writing. The descriptions in this chapter are expected to provide the general idea of the problem and how to systematically solve the problems.

Chapter 2: Theoretical Review

In Chapter 2 it will be described the theories of mergers acquisitions, an acquisition theory, and the financial aspects theory of an LBO analysis. Besides that, it also will be described the concept of measurement and analysis of investment returns in the company with an LBO funding.

Chapter 3 Data and Research Methodology

Chapter 3 is about the Data and Methodology. In this chapter it will be described the companies' data that will be used for the basis of analysis in the LBO acquisition. Besides that it also will be described the stages of the research methodology that will be used as a basis of the analysis in chapter four.

Chapter 4 Analysis and Discussion

In Chapter 4 it will be conducted an acquisition analysis using an LBO. The analysis mainly focuses on the financial aspects of the target company by following the stages of the research methodology as described in Chapter 3. After the analysis of the financial aspects was obtained, a discussion is conducted in order to answer the research questions and issues outlined in Chapter 1.

Chapter 5 Conclusions and Suggestions

In Chapter 5 conclusions will be drawn based on the results of the analysis that has been done in Chapter 4, as well as suggestion related to the research results.

CHAPTER 2

THEORITICAL REVIEW

2.1 Preface

A merger is a combination of two or more companies in which only one company survives and the merged company goes out of existence. In a merger, the acquiring company assumes the assets and liabilities of the merged company. A merger differs from a consolidation, in which in business consolidation two or more companies join to form an entirely new company. All of the combining companies are dissolved and only the new entity continues to operate.

Mergers are often categorized as horizontal, vertical or conglomerate. A horizontal merger occurs when two companies in the same business sector or industry combine. While for vertical mergers, companies that have a buyer-seller relationship merge to become one company. In a conglomerate merger, companies that are not in the same business sectors and do not have a buyer-seller relationship merge to become a company.

There are several reasons that a company might engage in merger. One of the most common reasons is expansion. Acquiring a company in a line of business or industry into which the company wants to expand can be quicker than the real investment. An acquisition may also provide certain synergistic benefits for the acquiring company, when the two companies complement one to another. Another reason for acquisition is that the acquiring company would like to obtain a high return for its investment by acquiring company for a certain period of time. In the time the acquiring company do exit strategy, they expect to obtain a high rate of return on investment from its merger acquisition. This expectation can be exercised at the time when the acquiring company do an acquisition analysis so that the acquiring company can deliberately choose its target company which will provide a high rate of return as expected.

A leveraged buyout (LBO) is defined as the acquisition of a company, division, business, a collection of assets (target) using debt to finance a large portion of the purchase price (Rosenbaum and Pearl, 2009). The remaining portion of the purchase price is funded with an equity by the acquiring company. LBO is often used by acquiring company to acquire a company, due to the high purchase price of acquisition which is often too expensive to finance by themselves. The acquiring company's objective is to realize an acceptable return on its equity investment, typically through a sale or initial public offering (IPO) of the target company (Rosenbaum and Pearl, 2009).

In the acquisition by an LBO, the acquiring company must be able to obtain the financing needed to acquire the target company. An investment bank usually helps to find investors to finance the acquisition or it plays as an arranger or underwriter of the debt used to fund the purchase price. The debt used in an LBO is raised through the issuance of various types of loans, debt securities, and other instruments. The equity portion of the financing structure is usually sourced from capital managed by the acquiring company. In the next section, it will be provided an overview of the theories of merger acquisition and leveraged buyout which will be used as a basis for the analysis in the next chapters.

2.2 Theories of Merger Acquisitions

There are several reasons that a company might find a way to expand its business. One of these ways is to expand through its internal growth. If a company is experiencing a slow internal growth, it may consider it is not suffice so that the company seeks to find an alternative to expand its business. Company often looks to merger and acquisition as a way to obtain growth. It often is hoped that by acquisitions it will lead not only to revenue growth, but also improved profitability through synergistic gains. Synergy is found when the combined company appear to have a positive net acquisition value. The difference between the value of the combined firm (V_{AB}) and the sum of the values of the firms as separate entities is the synergy from the acquisition (Ross et al, 2008). The synergy of acquisition is calculated using the following formula:

$$\text{Synergy} = V_{AB} - (V_A + V_B) \dots\dots\dots(2.1)$$

Where:

V_{AB} = The combined value of the two firms.

V_A = The value of A

V_B = The value of B

The synergistic effect must be greater than the sum of ($V_A + V_B$) to justify that acquisition gives benefits to the acquiring company. If the value of the combined firms is not greater than the sum of ($V_A + V_B$), then the acquiring company will have overpaid for the target company.

There are many potential sources of revenue enhancements in the acquisition process, and they may vary from transaction to transaction. The revenue enhancements may come from a

sharing of marketing opportunities by cross-marketing each company's products. Other source of revenue enhancements may come from the efficiency of operations and cost reduction (Weston, Mitchell, and Mulherin, 2004).

The cost reductions may come as a result of economies of scale, which is a decreasing in per unit of cost as a result of an increase in the size or volume of a company's operations. Financial synergy refers to the impact of an acquisition on the costs of capital to the acquiring company. The cost of capital of the acquiring company is lower due to financial synergy that exists in acquisition due to the bigger size of the leverage (Ross, Westerfield, Jaffe, and Jordan 2008).

Acquisition also results in an increase of market share and finally it may have a significant impact on the combined company's market power. Once the company obtains market power, then the company may impose pricing strategies which will provide advantage to the company (Weston, Mitchell, and Mulherin, 2004).

Work by Bradley, Desai, and Kim (in Weston et al, 2004) states that mergers create synergies. They include in their definition of synergies economies of scale, more effective management, improved production techniques, and the combination of complementary resources. An alternative theory regarding why a takeover transaction creates value is based on disciplinary motives. These are several theories that are based on disciplinary motives:

a. Mergers as value reducing decisions

In contrast to the theories based on transaction cost efficiencies and synergy, a number of theories argue that mergers are a source of value reduction. To some extent, these theories are related to the disciplinary motive for a takeover. Jensen (in Weston et al, 2004) argued that free cash flow is a source of value decreasing mergers. A firm with high free cash flow is one where internal funds are in excess of the investments required to fund positive net present value (NPV) projects.

Another value reducing theory of mergers is the Shleifer Vishny (in Weston et al, 2004) model of managerial entrenchment. In the model, managers make investments that increase the managers' value to shareholders. Such management specific investments do not enhance value to the shareholders themselves. Investments made by the managers can be in the form of acquisition in which the managers overpay but lower the likelihood that they will be replaced.

b. Managerial Hubris and Mergers

In his article, Roll (in Weston et al, 2004) suggested a novel theory of merger bidding based on managerial hubris. In his model, markets are strong form efficient but individual managers are prone to exercise self confidence. In such a model, the manager who has the most optimistic forecast of another firm's value falls prey to the winner's curse in bidding competitions.

As applied to mergers, the hubris theory suggests that mergers can occur even if they have no effects on value. In cases where the bid exceeds the target's value, the target sells and what is gained by the target shareholders in a wealth transfer from the bidding firm's owners (Roll in Weston et al, 2004).

To summarize the different theories of mergers is to distinguish the empirical predictions to the different merger theories regarding the effect of mergers on target, bidders, and combined value Weston, Mitchell, and Mulherin (2004) provide this framework in the Table 2.1 below.

Table 2.1 Theoretical Predictions of the Patterns of Gains in Takeovers

Theory	Combined Gains	Gains to Target	Gains to Bidders
Efficiency/Synergy	positive	positive	nonnegative
Agency Costs/Entrenchment	negative	positive	more negative
Hubris	zero	positive	negative

From the Table 2.1 above Weston, Mitchell, and Mulherin (2004) explain that the value increasing theories of mergers based on efficiency and synergy predict that the combined value of the two merging firms will increase and therefore, the merger will have a positive effect on firm value. If the gain in value to the target is not positive, the target shareholders will not sell. The gains to the bidding firm should be non negative. If the gains are negative, then the bidding firm will not complete the deal.

They also state that the value decreasing theories make alternative predictions. The agency cost and entrenchment models predict that a merger will have a negative effect on combined firm value. This is because any positive return to target shareholders is more than offset by the negative effect on the value of the bidding firm. While, the hubris theory of takeover suggests that the gains

to the combined firm in a merger is zero. Any positive gain borne by the target shareholders is merely an offset from the overbidding by the buyer (Weston, Mitchell, and Mulherin, 2004).

2.3 Acquisition By Leverage Buyout

In acquisition using leveraged buyout (LBO), the acquiring company uses debt to finance the acquired company. The most common form of merger acquisition involves purchasing the stock of the acquired company. Companies often merge in an attempt to diversify into another line of business. Companies experience greater success with horizontal combinations, which result in an increase in market share, which may provide other economic benefits (Rosenbaum and Pearl, 2009).

One of the fundamental reasons for merger acquisition is growth. Companies seeking to expand are faced with choice between internal growth and growth through merger acquisition. Internal growth may be a slow and uncertain process. Growth through merger acquisition may be a much more rapid process, although it brings with it its own problems. Companies may grow within their own industry or they may expand outside their business category. Another reason for merger acquisition is seeking a high return (Rosenbaum and Pearl, 2009).

As stated previously, an LBO is an acquisition that is financed partly with debt. It is usually cash transaction in which the cash is borrowed by the acquiring company. Much of the debt may be secured by the assets of the acquired company. The target company's assets are often used to provide collateral for the debt that is going to be incurred to finance the acquisition. Companies with assets that have a high collateral value can more easily obtain such financing. That is why an LBO is often easier to conduct in capital-intensive industries – companies that usually have more assets that may be used as collateral than noncapital intensive companies (Rosenbaum and Pearl, 2009).

There are two general categories of debt that are used in LBO which are secured and unsecured debt and they are often used together (Gaughan, 2007). Secured debt, which is sometimes called asset-based lending, may contain two subcategories of debt: senior debt and intermediate debt. In some smaller buyouts these two categories are considered one. In larger transaction there may be several layers of secured debt, which vary according to the term of the debt and the types of assets used as security. Unsecured debt, which is sometimes known as

subordinated debt and junior subordinated debt, lacks the protection of secured debt, but generally carries a higher return to offset this additional risk.

Within the category of secured financing, there are two subcategories, namely senior debt and intermediate term debt. Senior debt consists of loans secured by liens on particular assets of the company. The collateral, which provides the downside risk protection required by banks, includes physical assets such as land, plant and equipment, accounts receivable, and inventories. The bank projects the level of accounts receivables that the company would average during the period of the loan. This projection is usually based on the amount of accounts receivable the company has on its books at the time the loan is closed (Gaughan, 2007).

Intermediate term debt is usually subordinate to senior debt. It is often backed up by fixed assets such as land, plant and equipment. The collateral value of these assets is usually based on their market value (Gaughan, 2007).

PT XYZ as an acquiring company is an investor that seek attractive investment opportunities in the automotive industry since the company has considerable amount of experience in this field of business. The criteria used among the target LBO candidates, are as follows (Rosenbaum and Pearl, 2009):

a. Strong Cash Flow Generation

One of the most important characteristics of LBO candidates is the existence of cash flows as determined by examining the pattern of historical cash flows for the company. The more stable the historical cash flows, the greater the chance that the company is categorized as a target of the acquisition.

b. Proven Management Team

Stability is often measured by the length of time management is in place. Banks feel more secure when management is experienced and that means management has been with the company for a reasonable period of time. This also implies that there is greater likelihood that management will stay on after the transaction is completed. Banks often judge the ability of management to handle an LBO by the cash flows that were generated by the company they managed in the past. If prior management experience was that the company had significant liquidity problems, Bank will be much more cautious in participating in the leverage buyout.

c. Efficiency and Growth Opportunities

Assuming additional debt to finance an LBO usually imposes additional financial pressures on the target company. These pressures may be alleviated somewhat if the target company can significantly cut costs in some areas, such as fewer employees, reduced capital expenditures, elimination of redundant facilities, and tighter controls on operating expenses. Many LBO target acquisitions are inefficient and need cost restructuring. Leveraged buyout dealmakers work on finding areas where cost can be cut without damaging the business. When these cost cuts are focused on areas of waste or unnecessary expenditures, they may be of great benefit to the LBO target company.

d. Equity Interest of owners

The collateral value of assets provides downside risk protection to banks. The equity investment of the acquiring company acts as a cushion to protect banks. The greater the equity cushion, the more likely secured banks will not have to liquidate the assets. The greater the acquiring company's equity investment, the more likely it will stay with the target company if the acquisition is going to get tough.

e. Limited debt on the company's balance sheet

The lower the amount of debt on the company's balance sheet relative to the collateral value of the company's assets, the greater the borrowing capacity of the companies. If the company's balance sheet is already encumbered by significant financial leverage, it may be more difficult to finance the LBO.

f. Liquidation value is another benchmark of the company's floor value

Liquidation is measured as per-share value that would be derived if the company's assets were liquidated and all liabilities and preferred stock as well as liquidation costs were paid. Liquidation value may be a more realistic measure than book value. If accurately computed, it may be a more accurate indicator of the true value of the company's assets in that to some extent it reflects the market value of the assets. If the company is using its assets very efficiently, the company's value may be well in excess of the liquidation value.

g. Exit Strategies

Rosenbaum and Pearl (2009) depicts that most acquiring companies aim to exit their investments within a five-year holding period in order to provide timely returns to their investment. These returns are typically realized through a sale to another company or referred to as a strategic sale, a sale to another acquiring company, or an initial public offering (IPO). Acquiring companies may also extract a return prior to exit through a dividend recapitalization. The ultimate decision regarding when to exit from the investment, depends on the performance of the target company as well as the market conditions. When the target company has performed well or market conditions are favorable, the exit strategy may be used by acquiring company within a year or two years. Alternatively, the acquiring company may be forced to hold an investment longer than desired when the target company performance or the market does not perform well.

By the end of the investment horizon, the acquiring company has expected to increase the target's earning before interest tax and depreciation (EBITDA) and reduced its debt. The acquiring company also seeks to achieve multiple expansion at the time the exit strategy is executed. Several strategies are used to aim at achieving a higher exit multiple, including an increase in the target company's size and scale, operational improvements, a repositioning of the business.

2.4 Financial Aspects of Leverage Buyout Analysis

According to Rosenbaum and Pearl (2009) acquiring companies have historically sought a 20%+ annualized return and an investment exit within five years. In a traditional LBO, debt has typically comprised 60% to 70% of the financing structure, with equity comprising the remaining 30% to 40%. The high level of debt incurred by the target company is supported by its projected free cash flow and asset base, which enables the acquiring company to contribute a small equity investment relative to the purchase price. The ability to leverage the relatively small equity investment is important for acquiring company to achieve acceptable returns. The reason is because the use of leverage provides the additional benefit of tax savings realized due to the tax deductibility of interest expense.

Rosenbaum and Pearl (2009) also state that companies with stable and predictable cash flow, as well as substantial assets, generally represent attractive LBO candidates due to their ability to

support larger quantities of debt. Strong cash flow is needed to service periodic interest payments and reduce debt over the life of the investment. In addition, a strong asset base increases the amount of bank debt available to the borrower by providing greater comfort to lenders regarding the likelihood of principal recovery in the event of a bankruptcy .

During the time from which the acquiring company acquires the target until its exit, cash flow is used primarily to service and repay debt, thereby increasing the equity portion of the capital structure. At the same time, the acquiring company aims to improve the financial performance of the target and grow the existing business, thereby increasing enterprise value and further enhancing potential returns. An appropriate LBO financing structure must balance the target's ability to service and repay debt with its need to use cash flow to manage and grow the business (Rosenbaum and Pearl, 2009).

When the acquiring company is to purchase the target company, it must determine the value of the target company. The value of the target company is derived from the discounted future cash flows of the target company to become the net present value. This concept is similar to net present value calculations used for capital budgeting. The discounted future cash flows approach to valuing a target company is based on net present value (NPV). The NPV is used to determine whether a target company is financially worth pursuing. The formula of the NPV is given below (Gaughan, 2007):

$$NPV = I_0 - \sum_{t=1}^N \frac{FB_t}{(1+r)^t} \dots\dots\dots(2.2)$$

Where

FB_t = future benefit in year t

r = discount rate

I_0 = acquiring company's investment at time 0

When earnings are used instead of cash flows, the particular earnings measure utilized may differ depending on the user, but most earnings-oriented models use some version of adjusted income such as earnings before interest, taxes, depreciation, and amortization (EBITDA).

This value can then be computed as follows (Gaughan, 2007):

$$BV = -I_0 + \frac{FCF_1}{(1+r)} + \frac{FCF_2}{(1+r)^2} + \dots + \frac{FCF_5}{(1+r)^5} + \frac{FCF_6}{(1+r)^5} \dots\dots\dots(2.3)$$

Where:

BV = value of the target company

FCF_i = free cash flows in the i th period

g = the growth rate in future cash flows after the fifth year.

The continuity value (CV) represents the value that the target company could be expected to be sold at the end of the specific forecast period. This value is treated as a perpetuity and capitalizing the remaining cash flows, which it is assumed it is going to grow at a certain growth rate. Another way to arrive at the continuing value would be to apply an exit multiple. If an exit is used for the continuing value, then it is expected to apply during the exit period (Gaughan, 2007).

In computing enterprise value using discounted cash flow (DCF) it is implicitly included only those assets that contribute to the generation of free cash flows. If the company owns other assets that have a positive market value, but that do not contribute to cash flow generation, then the value of these assets needs to be added to the enterprise value that has been computed using DCF.

When DCF is used to arrive at enterprise value, the value of the equity is computed by deducting the value of the liabilities from the total enterprise value. Free cash flows are those cash flows, as measured by EBITDA, that are available to all capital providers, both equityholders as well as debtholders, after necessary deductions have been made for capital expenditures (CE) that are needed to maintain the continuity of the cash flow stream in the future. These expenditures are made to replace capital that may have been depleted through the company's operating activities. While the term of free cash flows (FCF) has been defined differently by some users, many also deduct any necessary changes in working capital (CWC) as well as cash taxes paid (CTP). The FCF is defined using the following formula (Gaughan, 2007):

$$FCF = EBITDA - CE - CWC - CTP \dots\dots\dots(2.4)$$

Where:

$EBITDA$ = Earnings before interest tax, depreciation, and amortization

CE = Capital expenditures

CWC = Changes in working capital

CTP = Cash taxes paid

In calculating FCF, depreciation is added back to net income. Net income plus depreciation is often referred to as measure of the firm's ability to generate funds from internal operations. FCFE can be defined as follows (Gaughan, 2007):

$$\begin{aligned}
 \text{FCFE} &= \text{Net Income} + \text{Depreciation} - \text{Gross Capital Expenditures} \\
 &\quad - \Delta \text{ Net Working Capital} + \text{New Debt Issues} \\
 &\quad - \text{Principal Repayments} - \text{Preferred Dividends.} \\
 &= \text{Net Income} - (\text{Gross Capital Expenditures} - \text{Depreciation}) \\
 &\quad - \Delta \text{ Net Working Capital} + \text{New Debt Issues} \\
 &\quad - \text{Principal Repayments} - \text{Preferred Dividends.} \dots\dots\dots(2.5)
 \end{aligned}$$

Free cash flow to the firm (FCFF) represents cash available to satisfy all investors holding claims against the firm's resources. These claim holders include common stockholders, lenders, and preferred stockholders. FCFF can be calculated in two ways (Gaughan, 2007):

First, by adding up cash flows to all of a firm's claim holders.

$$\text{FCFF} = \text{FCFE} + \text{Interest Expense} (1 - \text{Tax Rate}) + \text{Principal Payments} - \text{New Debt Issues} + \text{Preferred Dividends} \dots\dots\dots(2.6)$$

Second, by adjusting operating earnings before interest and taxes (EBIT)

$$\begin{aligned}
 \text{FCFF} &= \text{EBIT} (1 - \text{Tax Rate}) - (\text{Gross Capital Expenditures} - \text{Depreciation}) \\
 &\quad - \Delta \text{ Net Working Capital} \dots\dots\dots(2.7)
 \end{aligned}$$

The choice of the appropriate discount rate to calculate the present value of the future projected cash flows requires that the riskiness of the target company and the volatility of its cash flow to be assessed. As is true of other forms of capital investment, an acquisition is a risky endeavor. The target's cash flows are focused on as the cash flows that reflect the value of the investment that is about to be made by the acquiring company. The proper discount rate to consider is the cost of capital. This cost of capital is useful in capital budgeting because only one company is involved. The cost of capital for a given company can be measured through the following formula (Gaughan, 2007):

$$\text{CC} = \sum_{i=1}^n w_i k_i \dots\dots\dots(2.8)$$

Where:

CC = the firm's cost of capital.

w_i = the weight assigned to the particular k_i . This weight is the percentage of the total capital mix of the acquiring company that this source of capital accounts for.

k_i = the rate for this source of capital.

The weighted average cost of capital (WACC) is a broader measure than the cost of equity and represents the return that a firm must earn in order to induce the acquiring company to purchase a target company. The WACC is calculated using a weighted average of the firm's cost of equity and cost of debt as follows (Ross, et al, 2008):

$$WACC = \left(\frac{S}{S+B} \right) R_E + \left(\frac{B}{S+B} \right) R_B \left(1 - T_C \right) \dots \dots \dots (2.9)$$

Where:

S = the market value of equity

B = the market value of debt

R_B = the interest rate on debt

R_S = the return on equity stock

T_C = the firm's marginal tax rate.

The major components of cash investments include changes in working capital, gross capital expenditures, and acquisitions and divestitures. Free cash flow to equity investors (FCFE) is the cash flow remaining for paying dividends to common equity investors after the firm satisfies all obligations (Damodaran: 1997). These obligations include debt payments, capital expenditures, changes in net working capital, and preferred dividend payments.

The after-tax debt rate reflects the true cost of debt, given the fact that debt is a tax-deductible expense. The after-tax rate of debt can be determined as follows (Damodaran: 1997):

$$k^t = k_d(1 - t) \dots \dots \dots (2.10)$$

Where:

k^t = the after-tax cost of debt

k_d = the pretax cost of debt

t = the actual corporate tax rate for the firm.

Many rules determine the cost to the company of the common stock it has issued. One of the simplest methods is to calculate the historical rate of return on equity for the stock over a given time period. A 5- to 10-year historical period is often chosen (Gaughan, 2007). The time period selected would have to be placed in perspective by considering the company's growth to see whether it represents the company's current and expected conditions.

Another method that is sometimes employed to measure cost of equity is the capital assets pricing model using beta risk measure. This measure allows to consider the riskiness of the company and to use this risk level to determine the appropriate rate of return on the company's equity. The cost of equity using capital assets pricing model can be derived from the following expression (Gaughan, 2007):

$$R_i = R_{RF} + \beta_i(R_M - R_{RF}) \dots\dots\dots(2.11)$$

Where:

R_i = the rate of return on equity for company i

R_{RF} = the risk free rate of return. The Certificate of Bank Indonesia rate is typically used as the risk-free rate of interest.

β_i = the beta for company i

The rate of return on equity can also be measured by directly projecting the dividend flow. This calculation is easy in the case of common stock because the dividends are generally fixed. The following equation, derived from the Gordon model, demonstrates the relationship between the stock price and dividends (Gaughan, 2007):

$$P_s = D_i / (k_s - g) \dots\dots\dots(2.12)$$

Where:

P_s = the price of the firm's stock

D_i = the dividend paid in period i (i.e. the next quarter)

k_s = the capitalization rate for this stock

g =the growth rate of the dividends.

The preceding equation can be manipulated to solve for k_e (Gaughan, 2007).:

$$k_e = D_i/P_0 + g \dots\dots\dots(2.13)$$

The greater the risk associated with a given earnings streams of the target company, the higher the discount rate that will be used. If the projected cash flow or income stream is considered highly likely, a lower discount rate should be used. For high-risk cash flow or income streams, a risk premium is added, which increases the discount rate (Ross et al, 2009).

One of many criteria used to evaluate the feasibility of the target LBO company is whether the target company provides enough internal rate of return (IRR). IRR is the primary financial aspect indicator used by acquiring company to measure the attractiveness of a potential target LBO. IRR measures the rate of return on a acquiring company's investment for its investment to the target company. IRR is defined as the discount rate that equalizes investment value and the present value of cash inflows within the investment time so that the net present value (NPV) zero (Ross et al, 2009).

The IRR of the target company is basically measured the same way as the NPV measure explained above. The formula of IRR is given by (Ross et al, 2009) as follows:

$$0 = I_0 - \sum_{t=1}^N \frac{CF_t}{(+ IRR)^t} \dots\dots\dots(2.14)$$

Where

CF_t = future cash flows in year t

IRR = internal rate of return as discount rate

I_0 = acquiring company's investment at time 0

The IRR can also be computed from this formula assuming that cash flows of the target company grows after the fifth year as follows (Gaughan, 2007):

$$0 = -I_0 + \frac{FCF_1}{(1+IRR)} + \frac{FCF_2}{(1+IRR)^2} + \dots + \frac{FCF_5}{(1+IRR)^5} + \frac{FCF_6}{(1+IRR)^5} \dots \dots \dots (2.15)$$

Where:

IRR = internal rate of return

FCF_i = free cash flows in the i th period

g = the growth rate in future cash flows after the fifth year.

If IRR is used to value the acquisition, then the acquisition is justified when the IRR is greater than the weighted average cost of capital. Otherwise, the acquisition is considered to be a loss.

The minimum offer price may be defined as the target's stand-alone or present value (PV_T) or its current market value (MV_T) (i.e., the target's current stock price times its shares outstanding).

The maximum price is the sum of the minimum price plus the present value of net synergy (PV_{NS})

Note that the maximum price may be overstated if the current market value of the target firm reflects investor expectations of an impending takeover. As such, the current market value may reflect some portion of future synergies. Consequently, simply adding the present value of net synergy to the current market value target of the target firm can result in double counting some portion of future synergy (Rosenbaum and Pearl, 2009)..

The final negotiated price (P_F) is the sum of both the minimum purchase price and some percentage between 0 and 1 of the PV of net synergy. In theory, the final negotiated purchase price should lie somewhere between the minimum and maximum purchase price for the target company.

These relationships can be expressed as follows Rosenbaum and Pearl (2009):

Minimum purchase price	:	$PV_{MIN} = (PV_T \text{ or } MV_T)$
Maximum purchase price	:	$PV_{MAX} = PV_{MIN} + PV_{NS}$
Final or negotiated purchase price:		$P_F = PV_{MIN} + \alpha PV_{NS}$, where $0 \leq \alpha \leq 1$.
Purchase price range	:	$(PV_T \text{ or } MV_T) < P_F < (PV_T \text{ or } MV_T) + PV_{NS} \dots \dots (2.16)$

2.5 Leverage Buyout Financing Structure

The financing structure of LBO is mostly financed by debt with a small part of the purchase price is funded by an equity. The high use of debt or leverage in an LBO transaction may include financing by loans, debt securities such as bonds, or other debt instruments with varying conditions. Rosenbaum and Pearl (2009) provides some examples of the primary types of financing sources outlined below:

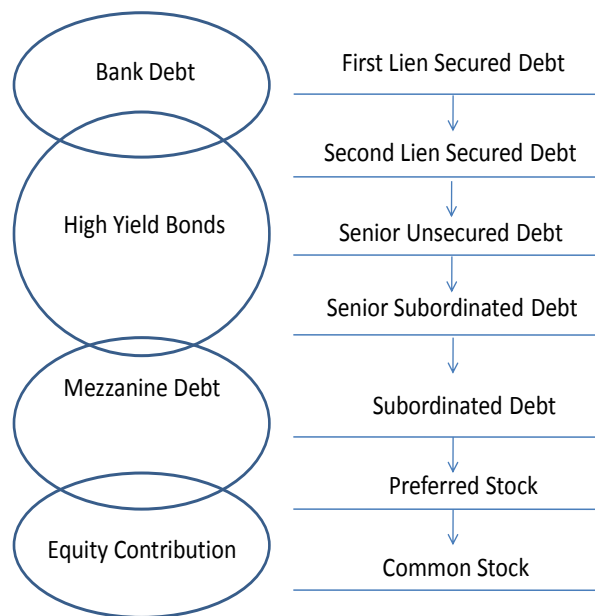


Figure 2.1 The general ranking of Financing structure in an LBO Capital Structure

Source: Rosenbaum, Investment Banking, 2009

From the above figure it can be noted that the higher the debt instrument ranks in the capital structure, the lower its risk and the lower its cost of capital to the borrower.

Rosenbaum and Peral (2009) provide explanations of the above types of financing structure in an LBO transaction are as follows:

a. Term Loan Facilities

A term loan is a bank loan with a specified maturity that requires principal repayment according to a defined bank's schedule. In a traditional term loan for an LBO the financing is structured as a first lien debt obligation and requires the borrower to maintain a certain credit standing contained in the credit agreement.

b. Debt Securities

Debt securities such as bonds provide alternative of an LBO financing structure for the acquiring company. The acquiring company may use its asset base as a lien for the income for the investors or a it may use the target company's asset base as source of income. The drawback of using bonds as financing structure of an LBO is that it requires consumable effort and time before the funds are collected.

c. Equity Contribution

The remaining portion of LBO funding comes in the form of an equity investment by the acquiring company. The equity investment usually ranges from approximately 30% to 40% of the LBO purchase price. The equity investment provides a cushion for lenders and bondholders in the event that the target company's value declines as equity value is used before debt holders suffer loss.

CHAPTER 3

DATA AND RESEARCH METHODOLOGY

3.1 Preface

This chapter provides information on the data used in the analysis of target companies LBO and the methodology to accomplish the analysis. The description begins with data which informs the types of data, where the data collected, how they are collected, the method used to collect data, and the characteristics of data. On the research methodology it is outlined steps of research and how the reserach questions stated in chapter 1 will be answered in the following chapter 4.

3.2 Description of Data

The management of PT XYZ as an acquiring company has stipulated in its business plan that in this year the company seeks to expand its business by untraditional expansion, i.e. by acquiring other company in the related business sector. Since PT XYZ is in the business of oil and automotive, it intends to acquire PT ABCD as its target company in the automotives industry sector listed in the Indonesia Stock Exchange.

From the companies in the automotives industry sector listed in the Indonesia Stock Exchange, PT ABCD has a total assets of less than Rp 1,000 billions. PT ABCD's financial reports from the end of 2006 up to 2009 (four years) were collected along with its current share prices from the Indonesia Stock Exchange. The characteristics of its assets and liabilities are given in the following table. In addition to the information of total assets, equities, share prices, it also provides information on sales figure, cost of good sold, earning before interest and taxes (EBIT), and net income as follows:

Table 3.1 The Characteristics of PT ABCD Financial Data

Financial Aspect	2006	2007	2008	2009
Total Assets	490,604,325,073	599,273,413,629	639,448,961,790	815,419,497,922
Total Debt	421,769,510,837	520,550,671,057	554,672,547,473	707,553,491,677
Total Equity	68,834,814,236	78,722,742,572	84,776,414,317	107,866,006,315
Sales	390,975,793,831	564,440,846,044	963,198,182,833	636,684,356,428
COGS	353,075,156,320	454,717,479,966	712,558,096,820	477,701,247,036
EBIT	4,354,918,879	21,190,339,801	47,162,636,015	33,744,956,649

Source: Financial Report, Indonesia Stock Exchange, rewritten.

From the above data, it can be inferred that PT ABCD is eligible as a target company, as its total book value of equity is less than Rp. 250 billions. In addition the management of PT XYZ selects PT ABCD as its target company of the LBO analysis for these several reasons:

1. It has moderate to high sales growth opportunities in the period of normal economic condition between 44.4% in 2007 to 70.6% in 2008, eventhough it was declining in 2009.
2. It has low capital expenditures which is only approximately 2% of sales, and
3. It has proven management team which provide assurance to the success of the company in its business.

Given these reasons, then the LBO acquisition analysis is carried out for the PT ABCD.

3.3 Research Methodology

An analysis of LBO is the central of analysis used to measure the financing structure, investment returns, and valuation in the LBO. In the LBO analysis used special knowledge of financial modeling and leveraged debt capital markets. The financial modeling gives an analysis of the target company's performance under some financing structures and scenarios. The analysis of an LBO financing structure usually uses an investment bank's leveraged finance. The objective is to present a financial condition of the acquiring company which within several financing scenarios provide maximum returns to the company. The financing structure must also provide the target company with sufficient flexibility to run its business according to plan.

Usually the acquiring company works with an investment bank to determine the financing structure for the acquisition. When the acquiring company has chosen the financing structure of the LBO then the investment bank continues to bid the target company. While there are many approaches to perform an LBO analysis, in this thesis it is used a LBO analysis designed by Rosenbaum (2009, page 180) using several steps as follows:

Table 3.2 An LBO Analysis Steps

Steps	Descriptions
Step 1	Locate and Analyze the Necessary Information
Step 2	Build the Pre-LBO Model: a. Build Historical and Projected Income Statement through EBIT b. Input Opening Balance Sheet and Project Balance Sheet Items c. Build Cash Flow Statement through Investing Activities.
Step 3	Input Transaction Structure: a. Enter Purchase Price Assumptions b. Enter Financing Structure into Sources and Uses
Step 4	Complete the Post-LBO Model: a. Build Debt Schedule b. Complete Pro Forma Income Statement from EBIT to Net Income c. Complete Pro Forma Balance Sheet d. Complete Pro Forma Cash Flow Statement
Step 5	Perform LBO Analysis: a. Analyze Financing Structure b. Perform Returns Analysis c. Determine Valuation d. Create Transaction Summary Page

The explanation of the above steps given by Rosenbaum and Pearl (2009) are provided below:

Step 1: Locate and Analyze the Necessary Information

When performing LBO analysis, the first step is to collect, organize, and analyze all available information on the target, its sector, and the specifics of the transaction. The information of the target company come from its financial statement, its stock price, including its financial performance. This information is typically contained in financial statement in the Indonesia Stock Exchange with additional information provided in company profile, management presentation and daily news.

From the banker perspective which intends to finance the acquisition, it has to be independently verify as much information as possible about the target and its sector. Public filings as well as equity research on the target company, if available, are particularly important resources. Within an investment bank, the acquisition team also relies on the judgment and experience of its analysts to provide insight on the target company.

Step 2: Build the Standalone Pre-LBO Model

In Step 2, it is provided detail step-by-step instructions on how to build the standalone operating model for the target company using information obtained from the primary financial statements. The pre-LBO model is a basic three-statement financial projection model (income statement, balance sheet, and cash flow statement) that initially excludes the effects of the LBO transaction.

The detail steps in steps are as follows:

Step 2.a: Build Historical and Projected Income Statement through EBIT

The acquiring company begins the pre-LBO model by inputting the target's historical income statement information for the prior three-year period, if available. The historical income statement is generally only built through EBIT, as the target's prior annual interest expense and net income are not relevant given that the target will be recapitalized through the LBO. As with the discounted cash flows, historical financial performance will be shown on a pro forma basis for non-recurring items and recent events. This provides a normalized basis for projecting and analyzing future financial performance.

Management projections for sales through EBIT are then entered into an assumptions line which feeds into the projected income statement until other operating scenarios are developed. This scenario is labeled as Analysis LBO Scenario 1 which uses an average financial performance of the year 2007, 2008, and 2009. For the other three scenarios (an analysis of LBO Scenario 2, Scenario 3, and Scenario 4), the projected income statements are produced using the 2009, 2008, and 2007 financial performance, respectively. From a debt financing perspective, the projection period for an LBO model is set at five years so as to match the maturity of the exit strategy of PT XYZ for the anticipated investment horizon.

Step 2.b: Input Opening Balance Sheet and Project Balance Sheet Items

The opening balance sheet (and potentially projected balance sheet data) for the target company is provided in the financial statement information and entered into the pre-LBO model. The PT XYZ as the acquiring company must then build functionality into the model in order to input the new LBO financing structure. PT XYZ also inserts a “pro forma” column, which nets the adjustments made to the opening balance sheet and serves as the starting point for projecting the target’s post-LBO balance sheet throughout the projection period.

Prior to the entry of the LBO financing structure, the opening and pro forma closing balance sheets are identical. As with the assumptions for the target’s projected income statement items, the acquiring company enters the assumptions for the target’s projected balance sheet items into the model through an assumptions line, which feeds into the projected balance sheet. Projected debt repayment is not modeled at this point as the LBO financing structure has yet to be entered into the sources and uses of funds. At this stage, annual excess free cash flow accrues to the ending cash balance for each projection year once the pre-LBO cash flow statement is completed. This ensures that the model will balance once the three financial statements are fully linked.

Step 2.c: Build Cash Flow Statement through Investing Activities

The cash flow statement consists of three sections—operating activities, investing activities, and financing activities. In building the cash flow statement, all the appropriate income statement items, including net income and non-cash expenses will be linked to the operating activities section of the cash flow statement. Net income is the first line item in the cash flow statement. It is initially inflated in the pre-LBO model as it excludes the pro forma interest expense and

amortization of deferred financing fees associated with the LBO financing structure that have not yet been entered into the model. The amortization of deferred financing fees is a non-cash expense that is added back to net income in the post-LBO cash flow statement.

Step 3: Input Transaction Structure

There are two further steps in step 3 of inputting transaction structure. These steps are:

Step 3.a: Enter Purchase Price Assumptions

Step 3.b: Enter Financing Structure into Sources and Uses

Step 3.a: Enter Purchase Price Assumptions

A purchase price must be assumed for a given target company in order to determine the supporting financing structure (debt and equity). It is assumed that PT XYZ is basing its purchase price and financing structure on the value of target company long term period.

Step 3.b: Enter Financing Structure into Sources and Uses

A sources and uses table is used to summarize the flow of funds required to consummate a transaction. The sources of funds refer to the total capital used to finance an acquisition. The uses of funds refer to those items funded by the capital sources in this case, the purchase of target company's equity, the repayment of existing debt, and the payment of transaction fees and expenses.

Once step 3 is finished, the acquiring company begins with developing debt schedule. Step 4 comprises as follows:

Step 4.a Build Debt Schedule

Step 4.b Complete Pro Forma Income Statement from EBIT to Net Income

Step 4.c Complete Pro Forma Balance Sheet

Step 4.d Complete Pro Forma Cash Flow Statement

The explanation of the above steps are as follows:

Step 4.a: Build Debt Schedule

The debt schedule is an integral component of the LBO model, serving to layer in the pro forma effects of the LBO financing structure on the target's financial statements. Specifically, the debt schedule enables the acquiring company to:

- a. complete the pro forma income statement from EBIT to net income.
- b. complete the pro forma long-term liabilities and shareholders' equity sections of the balance sheet.
- c. complete the pro forma financing activities section of the cash flow statement.

The debt schedule is typically constructed in accordance with the security and seniority of the loans, securities, and other debt instruments in the capital structure i.e beginning with the term loan and then followed by bonds).

Step 4.b: Complete Pro Forma Income Statement from EBIT to Net Income

The calculated average annual interest expense for each loan, bond, or other debt instrument in the capital structure is linked from the completed debt schedule to its corresponding line item on the income statement. Cash interest expense refers to a company's actual cash interest and associated financing-related payments in a given year. It is the sum of the average interest expense for each cash-pay debt instrument plus the commitment fee on the unused portion of the administrative agent fee.

Step 4.c: Complete Pro Forma Balance Sheet

The balance sheet is completed by linking the year-end balances for each debt instrument directly from the debt schedule. The remaining non-current and non-debt liabilities, captured in the other long-term liabilities line item, are held constant at the prior year level in the absence of specific management guidance.

Step 4.d: Complete Pro Forma Cash Flow Statement

To complete the cash flow statement, the repayments for each debt instrument, as calculated in the debt schedule, are linked to the appropriate line items in the financing activities section and summed to produce the annual repayment amounts. The annual pro forma beginning and ending cash balances are then calculated.

The final step of the LBO acquisition is to perform an LBO analysis. This analysis consists of four steps which at the end provides the acquisition valuation and the summary page. The final step of the acquisition analysis is described below.

Step 5 Perform LBO Analysis

Steps to perform LBO analysis consists of four further steps, namely:

Step 5.a Analyze Financing Structure

Step 5.b Perform Returns Analysis

Step 5.c Determine Valuation

Step 5.d Create Transaction Summary Page

This step is designed to evaluate various financing structures, gauge the target's ability to service and repay debt, and measure the acquiring company's investment returns and other financial effects under multiple operating scenarios. By using this analysis, in turn, enables the acquiring company to determine an appropriate value of the target company. The explanation of these steps are given below:

Step 5.a: Analyze Financing Structure

A central part of LBO analysis is the crafting of an optimal financing structure for a given transaction. From the acquiring company perspective, this involves determining whether the target's financial projections can support a given leveraged financing structure under various business and economic conditions.

Step 5.b: Perform Returns Analysis

After analyzing the contemplated financing structure from a debt repayment and credit statistics perspective, the acquiring company determines whether it provides sufficient returns to the acquiring company given the proposed purchase price and equity contribution. Historically, the acquiring company have sought IRR of 20% plus in assessing acquisition opportunities. If the implied returns are too low, both the purchase price and financing structure need to be revisited.

IRRs are driven primarily by the target's projected financial performance, the assumed purchase price and financing structure and the assumed exit multiple and year (assuming a sale). In a traditional LBO analysis a full exit via a sale of the entire company in five years is assumed.

Step 5.c: Determine Valuation

Usually, the acquiring company bases its valuation of an LBO target in large part on its comfort with realizing acceptable returns at a given purchase price. This analysis assumes a given set of financial projections, purchase price, and financing structure, as well as exit multiple and year.

Step 5.d: Create Transaction Summary Page

Once the LBO model is fully functional, all the essential model outputs are linked to a transaction summary page. This page provides an overview of of funds, acquisition multiples, summary returns analysis, and summary financial data. This format allows the acquisition deal team to quickly review and spot-check the analysis and make adjustments to the purchase price, financing structure, operating assumptions, and other key inputs as necessary.

3.4 Research Flow-Chart

Based on the research methodology explained above, the steps of the LBO acquisition analysis can be summarized in the following flow chart.

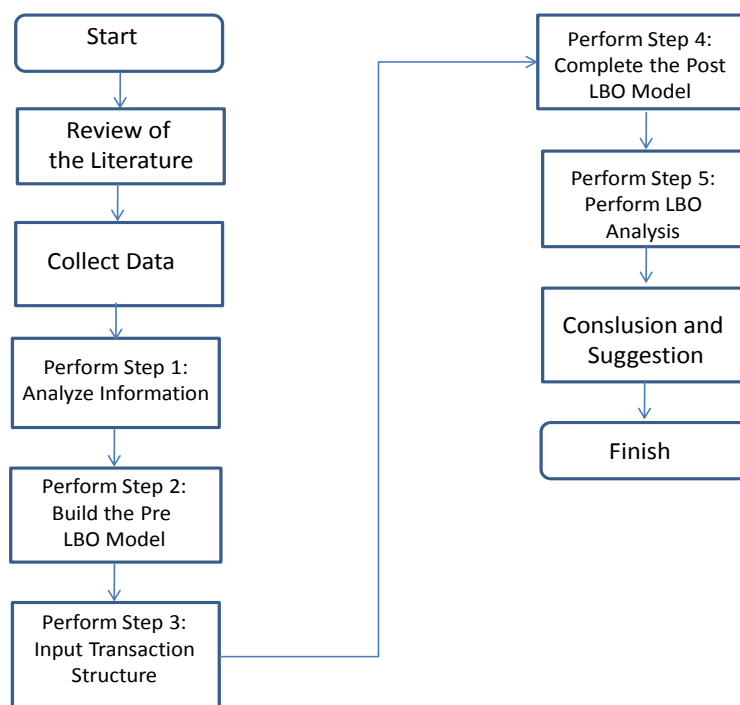


Figure 3.1 Flow Chart of the LBO Research Methodology

CHAPTER 4

ANALYSIS AND DISUSSION

4.1 Preface

In this chapter it will be analyzed the feasibility of the six companies which become target of the acquisition. The analysis follows steps described in Chapter Three and by answering research questions in Chapter One.

4.2 Analysis of the Value of the Target Company

In order to answer which company shall be acquired, the target company must provide Internal Rate of Return (IRR) which is quite bigger than the hurdle rate of PT XYZ. The analysis of IRR follows these steps:

Step 1: Analyze the Necessary Information

The first step is to collect, organize, and analyze all available information on the target company. The information of the target company come from its financial statement, its stock price, including its financial performance. The financial statement figures and its stock price are given in Table 4.1 as follows:

Table 4.1 PT ABCD's Financial Information

No.	Parameter	December 2009
1.	Total Assets	815,419,497,922
2.	Total Debt	707,553,491,677
3.	Total Equity	107,866,006,315
4.	Total Capitalization	46,875,000,000
5.	Stock Price	1,250

Source: PT ABCD's Financial Statements, reproduced.

Based on the above company's information in Table 4.1 it is noted that PT ABCD has total book value of equity is less than Rp. 250 billions. Accordingly PT ABCD qualifies as a target company since Management of PT XYZ limits its acquisition value less than Rp 250 billions. The value of its book equity is Rp 107,866,066,315. The stock price per share is Rp1,250 at the end of December 31, 2009. While the capitalization value is Rp. 46,875,000,000. This capitalization value reflects the market value of the firm since PT ABCD is public company. This is surprising a

low capitalization since its book value of equity is Rp. 107,866,066,315. Management of PT XYZ may base their estimate value of acquisition since by purchasing all outstanding value of stocks of the target company essentially the same of acquiring the whole companies. Accordingly the price estimate for the acquisition is relied on these capitalization value.

Step 2: Build the Standalone Pre-LBO Model

In this step it will be built the standalone operating model for the target company using information obtained from the financial statements obtained in the first step. The pre-LBO model is a basic three-statement financial projection model (income statement, balance sheet, and cash flow statement) that initially excludes the effects of the LBO transaction. The detail steps are as follows:

2.a Build Historical and Projected Income Statement through EBIT

The analysis begins the pre-LBO model by inputting the target's historical income statement information for the prior four year period 2006, 2007, 2008, and proforma 2009. The historical and projected income statement for the company PT ABCD is given in Table 4.2 as follows:

		Pre LBO			
		2006	2007	2008	Pro Forma 2009
Sales		390,975,793,831	564,440,846,044	963,198,182,833	636,684,356,428
	% growth	0.0%	44.4%	70.6%	-33.9%
Cost of Goods Sold		353,075,156,320	454,717,479,966	712,558,096,820	477,701,247,036
Gross Margin	% Margin	9.7%	19.4%	26.0%	25.0%
Selling, General & Administrative		46,443,510,158	50,348,616,408	74,921,138,257	11,603,271,363
	% Sales	11.9%	8.9%	7.8%	1.8%
Other (Expenses)/ Income		12,897,791,526	-38,184,409,869	-128,556,311,741	-98,032,294,004
EBITDA		4,354,918,879	21,190,339,801	47,162,636,015	33,744,956,649
	% Margin	1.1%	3.8%	4.9%	5.3%
Depreciation & Amortization		0.0%	0.0%	0.0%	0.0%
EBIT		4,354,918,879	21,190,339,801	47,162,636,015	33,744,956,649

Source: Financial Statement of PT ABCD, reproduced

The historical income statement is built through EBIT, as the target's prior annual interest expense and net income are not relevant given that the target will be recapitalized through the LBO. Based on the above Income Statements, it can be calculated:

- The average percentage of sales growth rate per year is 27%
- The average percentage of cost of goods sales ratio per year is 76.5%
- The average percentage of selling, general and administrative expenses is 6,2%
- The average percentage of other expenses is 11.8%
- The average percentage of EBIT to Sales is 4.7%, and
- The average EBITDA multiple to Initial Investment is 23.46.

These values are used as the first parameter scenario in the projected income statement.

The projections for sales through EBIT are then entered into an assumptions line which feeds into the projected income statement until other operating scenarios are developed. This scenario is labeled as Scenario 1. The projected income statement of PT ABCD for the next 5 years from 2010 up to 2014 is given in Table 4.3 below.

Table 4.3 Value ABCD LBO Income Statement
(in Rp, fiscal year ending December 31)

Income Statement		Income Statement Projection for the Period 2010 up to 2014				
		Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Sales		808,832,602,370	1,027,526,704,642	1,305,351,843,704	1,658,296,011,347	2,106,670,070,997
	% growth	0	0	0	0	0
Cost of Goods Sold		618,941,810,627	786,292,784,409	998,892,516,547	1,268,975,475,037	1,612,084,112,726
Gross Margin	% Margin	0	0	0	0	0
Selling, General & Administrative		49,934,391,782	63,435,772,601	80,587,689,203	102,377,182,223	130,058,170,717
	% Sales	0	0	0	0	0
Other (Expenses) / Income		(95,736,475,238)	(121,621,933,422)	(154,506,363,980)	(196,282,165,879)	(249,353,409,463)
EBITDA		44,219,924,724	56,176,214,210	71,365,273,973	90,661,188,207	115,174,378,091
	% Margin	0	0	0	0	0
Depreciation & Amortization		16,374,376,536	20,744,304,092	26,296,931,473	33,352,016,934	42,315,776,193
EBIT		27,845,548,188	35,431,910,119	45,068,342,501	57,309,171,274	72,858,601,898

Sources: Financial statement of PT ABCD, reproduced

Step 2.b: Input Opening Balance Sheet and Project Balance Sheet Items

The opening balance sheet for the PT ABCD (target company) is provided in the financial statement information and entered into the pre-LBO model. PT XYZ as the acquiring company then builds functionality into the model in order to input the new LBO financing structure. PT XYZ also includes a pro forma balance sheet, which is made to the opening balance sheet and serves as the starting point for projecting the target's post-LBO balance sheet throughout the projection period.

The opening balance sheet of PT ABCD at the end of 2008 and pro-forma balance sheet at the end of 2009 appear in Table 4.4 as follows:

Table 4.4 Balance Sheet PT ABCD		
(in Rps, fiscal year ending December 31)		
	Opening 2008	Pro Forma 2009
Cash and cash equivalent	21,942,239,333.0	36,550,510,452
Account Receivable	85,958,307,916	85,648,467,854
Inventories	250,604,151,066.0	453,830,353,253
Prepays and other current assets	43,149,788,572	7,934,793,379
Total Current Assets	401,654,486,887	583,964,124,938
Property, Plant, Equipment, net	210,861,484,028.0	202,038,279,904
Goodwill and Intangibe assets	14,119,427,439	9,886,224,423
Other Assets	12,813,563,436	19,530,868,727
Total Assets	639,448,961,790	815,419,497,992
Account Payable	299,844,595,228	137,392,715,783
Accured Liabilities	190,553,304	338,035,992,168
Other Current liabilities	64,720,866,149	49,109,723,801
Total Current Liabilities	364,756,014,681	524,538,431,752
Bank Credit Facilities	179,589,644,644	169,141,321,244
New Bank Credit Facility	0.0	0
Other Long Term Liabilities	10,326,888,148	13,873,738,681
Total Liabilities	554,672,547,473	707,553,491,677
Noncontrolling Intrest	0	120,503,775
Shareholder's Equity	84,776,414,317	107,745,502,540
Total Shareholders Equity	84,776,414,317	107,866,006,315
Total Liabilities and Equity	639,448,961,790	815,419,497,992

Source: Financial statement of PT ABCD, reproduced

(in Rps, fiscal year ending December 31)		
Balance Sheet PT ABCD	Pre LB O	
	Opening 2008	Pro Forma 2009
Cash and cash equivalent	21,942,239,333.0	36,550,510,452
Account Receivable	85,958,307,916	85,648,467,854
Inventories	250,604,151,066.0	453,830,353,253
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New Bank Credit Facility	0.0	0
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Noncontrolling Intrest	0	120,503,775
Shareholder's Equity	84,776,414,317	107,745,502,540
Total Shareholders Equity	84,776,414,317	107,866,006,315
Total Liabilities and Equity	639,448,961,790	815,419,497,992

Source: Financial statement of PT ABCD, reproduced

Based on the PT ABCD balance sheets and income statements for the year 2008 and 2009, it can be calculated the PT ABCD financial ratios as shown in Table 4.5.

Table 4.5 PT ABCD Financial Ratios for 2008, 2009, and Projected 2010

No.	Description	2008	2009	Projected 2010
1.	Days Sales Outstanding (DSO)	49.28	38.65	43.96
2.	Days Inventory Held (DIH)	191.48	267.63	229.56
3.	Prepaid and other current assets (% of sales)	1%	1%	1%
4.	Capital Expenditures (% of sales)	0%	0%	2%
5.	Depreciation (% of sales)	0%	0%	2%
6.	Amortization (% of Book Value Goodwill)	0%	0%	2%
7.	Days A/P to Sales Outstanding (APSO)	229.10	81.02	155.06
8.	Accured Liabilities (% of sales)	10%	10%	10%
9.	Other Current Liabilities (% of sales)	2.5%	2.5%	2.5%

Source: Financial statement of PT ABCD, reproduced

The financial ratios given in Table 4.5 above and the inputing balance sheet of PT ABCD at the end of 2009 are used to project the PT ABCD balance sheets for the next 5 years beginning 2010 up to 2014. The projected balance sheets of PT ABCD for the next five years at the end of 2010 up 2014 are given in Table 4.6 below.

Table 4.6 PT ABCD Balance Sheet Projection

	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Cash and cash equivalent	12,814.81	13,424.26	84,402.20	172,554.06	332,220.79
Account Receivable	97,424.19	116,286.14	152,479.00	190,688.76	244,164.58
Inventories	453,830.35	453,830.35	453,830.35	453,830.35	453,830.35
Prepays and other current assets	7,934.79	7,934.79	7,934.79	7,934.79	7,934.79
Total Current Assets	572,004.16	591,475.56	698,646.35	825,007.97	1,038,150.51
Property, Plant, Equipment, net	202,038.28	202,038.28	202,038.28	202,038.28	202,038.28
Goodwill and Intangibe assets	9,688.50	9,494.73	9,304.84	9,118.74	8,936.36
Other Assets	19,530.87	19,530.87	19,530.87	19,530.87	19,530.87
Total Assets	803,261.80	822,539.43	929,520.33	1,055,695.86	1,268,656.02
	-	-	-	-	-
Account Payable	262,945.75	254,291.47	373,704.03	442,570.38	582,671.94
Accured Liabilities	-	-	-	-	-
Other Current liabilities	-	-	-	-	-
Total Current Liabilities	262,945.75	254,291.47	373,704.03	442,570.38	582,671.94
Bank Credit Facilities	-	-	-	-	-
New Bank Credit Facility	50,000.00	50,000.00	-	-	-
Other Long Term Liabilities	-	-	-	-	-
Total Liabilities	312,945.75	304,291.47	373,704.03	442,570.38	582,671.94
Noncontrolling Intrest	-	-	-	-	-
Shareholder's Equity	490,316.05	518,247.96	555,816.30	613,125.47	685,984.08
Total Shareholders Equity	490,316.05	518,247.96	555,816.30	613,125.47	685,984.08
Total Liabilities and Equity	803,261.80	822,539.43	929,520.33	1,055,695.86	1,268,656.02

Source: Financial statement of PT ABCD, reproduced

From an LBO financing perspective, the PT ABCD analysis the projection period is set to 5 years as this is the horizon time PT XYZ set for its investment. Additional cases in addition to the Average Case Scenario 1, which are three other assumptions which refrelect a more conservative operating scenario, moderate and optimistic case will be deliver below.

PT XYZ uses the assumptions for constructing the target's projected balance sheet items into the model through an assumptions line, which feeds into the projected balance sheet. Projected debt repayment is not modeled at this point as the LBO financing structure has yet to be entered into the sources and uses of funds. At this stage, annual excess free cash flow accrues to the ending cash balance for each projection year once the pre-LBO cash flow statement is completed. This ensures that the model will balance once the three financial statements are fully linked.

Step 2.c: Build Cash Flow Statement through Investing Activities

Once the projected balance sheets of PT ABCD are completed, then it can be constructed the Cash Flows Projections. The Cash Flows projection in the pre-LBO model has not considered the debt financing. The ABCD Pre LBO cash flow is given in the following Table 4.7 (in millions).



Table 4.7 PRE LBO ABCD CASH FLOW STATEMENT

Descriptions	Year 2009
Operating Activities	
Net Income	33,745
Plus: Depreciation & Amortization	-
Changes in Working Capital	-
(Inc) / Dec. in Account Receivables	310
(Inc) / Dec. in Inventories	(203,226)
(Inc) / Dec. in Prepaid and other current assets	35,215
(Inc) / Dec. in Account Payable	(162,452)
(Inc) / Dec. in Accured Liabilities	337,845
(Inc) / Dec. in Other Current Liabilities	(15,611)
Cash Flow From Operating Activities	25,826
Investing Activities	
Capital Expenditures	(8,823)
Other Investing Activities	2,484
Cash Flow From Investing Activities	(6,339)
Financing Activities	
Bank Credit Facilities	(10,448)
Other Long Term Liabilities	3,547
Noncontrolling Intrest	121
Equity Issuance / (repurchase)	(10,776)
Cash Flow From Financing Activities	(17,557)
Excess Cash for the Period	14,608
Beginning Cash Balance	21,942
Ending Cash Balance	36,551

Source: Financial statement of PT ABCD, reproduced

The cash flow statement consists of three sections—operating activities, investing activities, and financing activities. In building the cash flow statement, all the appropriate income statement items, including net income and non-cash expenses will be linked to the operating activities section of the cash flow statement. Net income is the first line item in the cash flow statement. It is initially inflated in the pre-LBO model as it excludes the pro forma interest expense and amortization of deferred financing fees associated with the LBO financing structure that have not yet been entered into the model. The amortization of deferred financing fees is a non-cash expense that is added back to net income in the post-LBO cash flow statement. The PT ABCD cash flow statement projection is given in Table 4.8 below.

	Projection Period				
	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Operating Activities					
Net Income	(15,554,451,812)	27,931,910,119	37,568,342,501	57,309,171,274	72,858,601,898
Plus: Depreciation & Amortization	16,374,376,536	20,744,304,092	26,296,931,473	33,352,016,934	42,315,776,193
Changes in Working Capital Items					
(Inc) / Dec. in Account Receivables	(11,775,726,937)	(18,861,949,713)	(36,192,854,504)	(38,209,763,784)	(53,475,813,022)
(Inc) / Dec. in Inventories	-	-	-	-	-
(Inc) / Dec. in Prepaid and other current assets	-	-	-	-	-
(Inc) / Dec. in Account Payable	262,945,753,124	(8,654,280,147)	119,412,554,970	68,866,356,418	140,101,560,198
(Inc) / Dec. in Accured Liabilities	-	-	-	-	-
(Inc) / Dec. in Other Current Liabilities	-	-	-	-	-
Cash Flow From Operating Activities	251,989,950,911	21,159,984,350	147,084,974,439	121,317,780,842	201,800,125,266
Investing Activities					
Capital Expenditures	(16,374,376,536)	(20,550,534,093)	(26,107,036,874)	(33,165,920,227)	(42,133,401,420)
Other Investing Activities	197,724,488	-	-	-	-
Cash Flow From Investing Activities	(16,176,652,047)	(20,550,534,093)	(26,107,036,874)	(33,165,920,227)	(42,133,401,420)
Financing Activities					
Bank Credit Facilities	(230,000,000,000)	-	(50,000,000,000)	-	-
Other Long Term Liabilities	-	-	-	-	-
Noncontrolling Intrest	-	-	-	-	-
Equity Issuance / (repurchase)	-	-	-	-	-
Cash Flow From Financing Activities	(230,000,000,000)	-	(50,000,000,000)	-	-
Excess Cash for the Period	5,813,298,864	609,450,257	70,977,937,565	88,151,860,615	159,666,723,847
Beginning Cash Balance	7,001,515,000	12,814,813,864	13,424,264,121	84,402,201,686	172,554,062,301
Ending Cash Balance	12,814,813,864	13,424,264,121	84,402,201,686	172,554,062,301	332,220,786,148

Source: Financial statement of ABCD, reproduced

Step III(a): Enter Purchase Price Assumptions

PT XYZ then assumes a purchase price for ABCD in order to determine the supporting financing structure (debt and equity). For PT ABCD, it is assumed that PT XYZ is basing its purchase price and financing structure on its enterprise value. The enterprise value of PT ABCD is determined by adding net debt to the calculated equity value. The calculated enterprise value of PT ABCD is as follows:

Table 4.9 Enterprise Value of PT ABCD at the end of 2009

Cash Offer Price per Share	Rp	1,250
Fully Diluted Shares Outstanding		37,500,000
Implied Equity Value	Rp.	46,875,000,000
Plus: Total Debt		707,553,491,677
Plus: Preferred Stock		-
Plus: Noncontrolling Interest		120,503,775
Less: Cash and Cash Equivalents		(36,550,510,452)
Implied Enterprise Value	Rp	717,998,485,000

Step III(b): Enter Financing Structure into Sources and Uses

PT XYZ needs *sources of funds* which refer to the total capital used to finance an acquisition. While, the *uses of funds* refer to those items funded by the capital sources, namely the purchase of PT ABCD equity, the repayment of existing debt, and the payment of transaction fees and expenses. The sources and uses of funds for financing PT ABCD is shown in the Table 4.10 below.

Table 4.10 Sources and Uses of Financing Structure

Sources of Funds Structure served as the first preliminary proposed financing structure for the PT ABCD:

1. 40% of the enterprise value 5 year Term loan Rp 280,000,000,000 at 15%
2. 60% of the enterprise value equity contribution Rp. 420,000,000,000
3. Cash on hand for the remaining and additional fee Rp. 25,000,000,000

In this sources of funding, PT XYZ also contemplated a Rp. 25 billion cash on hand as part of the financing. While not an actual source of funding for the ABCD LBO, the cash on hand provides liquidity to fund anticipated fee payment of bank's letters of credit, and other cash uses at, or post, closing.

The Uses of Funds include:

1. The purchase of ABCD's equity for Rp. 46,875,000,000
2. The repayment of ABCD's existing obligations Rp. 707,553,491,677
3. The repayment of non controlling interest Rp 120,503,775
4. The payment of total transaction fees and expenses of Rp. 25 billion (consisting of financing ABCD Rp. 17,998,485,000 and fees and other expenses of Rp. 7,001,515,000).

The total sources and uses of funds are Rp. 725 billion, which is Rp. 7 billion higher than the implied enterprise value calculated in Table 4.3. This is due to the reserve payment of Rp 7 billion of total fees and expenses.

Step III(c): Link Sources and Uses to Balance Sheet Adjustments Columns

Once PT XYZ completes the sources and uses of funds, each amount is linked to the appropriate cell in the adjustments columns adjacent to the opening balance sheet. The equity contribution is also adjusted to account for any transaction related fees and expenses that are expensed upfront. These adjustments serve to bridge the the pro forma balance sheet to the next year balance sheet projection, which forms the basis for projecting the target's balance sheet throughout the projection period.

Step IV Complete the Post LBO Model

This steps comprise of four steps beginning with constructing a debt schedule. The debt schedule is an integral component of the LBO model, serving to layer in the pro forma effects of the LBO financing structure on the target's financial statements. By using the debt schedule enables PT XYZ to:

1. Complete the pro forma income statement from EBIT to net income.
2. Complete the pro forma long-term liabilities and shareholders' equity sections of the balance sheet.

Step IV(a): Build Debt Schedule

In this step, PT XYZ completes the pro forma financing activities section of the cash flow statement. The debt schedule applies free cash flow to make mandatory and optional debt repayments, thereby calculating the annual beginning and ending balances for each debt tranche. The debt repayment amounts are linked to the financing activities section of the cash flow statement and the ending debt balances are linked to the balance sheet. The debt schedule is also used to calculate the annual interest expense for the individual debt instruments, which is linked to the income statement. The debt schedule of PT ABCD appears as shown in Table 4.11.

Table 4.11 Debt Schedule PT ABCD

(in Rps, fiscal year ending December 31)

	Pro Forma 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Lending Rate	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Cash Flow From Operating Activities		251,989,950,911	21,159,984,350	147,084,974,439	121,317,780,842	201,800,125,266
Cash Flow from Investing Activities		-16,176,652,047	-20,550,534,093	-26,107,036,874	-33,165,920,227	-42,133,401,420
Cash Available for Debt Repayment		235,813,298,864	609,450,257	120,977,937,565	88,151,860,615	159,666,723,847
Cash Mandatory for B/S (Minimum)		5,000,000,000	5,000,000,000	5,000,000,000	5,000,000,000	5,000,000,000
Cash from Balance Sheet		7,001,515,000	12,814,813,864	13,424,264,121	84,402,201,686	172,554,062,301
Cash Available for Optional Debt Repayment		242,814,813,864	13,424,264,121	134,402,201,686	172,554,062,301	332,220,786,148
Bank Credit Facility						
Credit Facility Size	280,000,000,000					
Lending Rate	15.00%					
Term	5 Years					
Commitment Fee on Unusec	0.50%					
Beginning Balance		-	50,000,000,000	50,000,000,000	-	-
Drawdown	280,000,000,000	0	-	-	-	-
Repayment		230,000,000,000	-	50,000,000,000	-	-
Credit Bank Ending Balance		50,000,000,000	50,000,000,000	-	-	-
Interest Rate		15.00%	15.00%	15.00%	15.00%	15.00%
Interest Expense		42,000,000,000	7,500,000,000	7,500,000,000	-	-
Commitment Fee		1,400,000,000	-	-	-	-
Repayment of Debt & Non Controlling Interest		744,224,505,904				
Cash Handed	25,000,000,000					
Cash from equity Contribution	420,000,000,000					
Total Cash Received Pre LBO	725,000,000,000					
Cash Balance after Debt Repayment		12,814,813,864	13,424,264,121	84,402,201,686	172,554,062,301	332,220,786,148
		12,814,813,864	13,424,264,121	84,402,201,686	172,554,062,301	332,220,786,148

Source: Financial statement of ABCD, reproduced

The debt schedule is constructed in accordance with the seniority of the bank loans and other debt instruments in the capital structure. As detailed in the exhibit, it began the construction of PT ABCD's debt schedule by entering the lending rate, followed by the calculation of annual projected cash available for debt repayment (free cash flow). Then it entered the key terms for

each individual debt instrument in the financing structure (i.e., size, term, rate, and commitment fee).

Cash Available for Debt Repayment (Free Cash Flow)

The annual projected cash available for debt repayment is the sum of the cash flows provided by operating and investing activities on the cash flow statement. It is calculated in a section beneath the lending rate inputs. For each year in the projection period, this amount is first used to make mandatory debt repayments on the term loan tranches. The remaining cash flow is used to make optional debt repayments, as calculated in the cash available for optional debt repayment line item (See Table 4.11 above).

In addition to internally generated free cash flow, existing cash from the balance sheet may be used to make incremental debt repayments. In this case, the post-LBO balance sheet has a cash balance, the management of PT XYZ chooses to keep a constant minimum level of cash on the balance sheet of Rp. 5 billion throughout the projection period by inputting a rupiah amount under the “Cash Mandatory Minimum” heading (see Table 4.11 above).

As shown in Table 4.11, pro forma for the LBO, PT ABCD generates Rp. 251,989,950,911 of cash flow from operating activities in 2010. Netting out (Rp. 16,176,652,047 of cash flow from investing activities results in cash available for debt repayment of Rp. 235,813,298,864. After satisfying the Rp5 billion mandatory of cash minimum, PT ABCD has Rp. 242,814,813,864 of cash available for optional debt repayment.

Step IV(b): Complete Proforma Income Statement

The calculated average annual interest expense for each loan in the capital structure is linked from the completed debt schedule to its corresponding line item on the income statement (see Table 4.10). Cash interest expense refers to PT ABCD’s actual cash interest and associated financing-related payments in a given year. It is the sum of the average interest expense for each cash-pay debt instrument plus the commitment fee on the administrative agent fee. As shown in Table 4.11, PT ABCD is projected to have Rp. 43,400,000,000 of cash interest expense in 2010. Table 4.12 below shows the Income Statement Projection of PT ABCD for 2010 to 2014 in million rupiah.

Table 4.12 Value PT ABCD LBO Income Statement
(in Rp, fiscal year ending December 31)

Income Statement		Income Statement Projection for the Period 2010 up to 2014				
		Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Sales		808,832,602,370	1,027,526,704,642	1,305,351,843,704	1,658,296,011,347	2,106,670,070,997
	% growth	27%	27%	27%	27%	27%
Cost of Goods Sold		618,941,810,627	786,292,784,409	998,892,516,547	1,268,975,475,037	1,612,084,112,726
Gross Margin	% Margin	23%	23%	23%	23%	23%
Selling, General & Administrative		49,934,391,782	63,435,772,601	80,587,689,203	102,377,182,223	130,058,170,717
	% Sales	6%	6%	6%	6%	6%
Other (Expenses)/ Income		(95,736,475,238)	(121,621,933,422)	(154,506,363,980)	(196,282,165,879)	(249,353,409,463)
EBITDA		44,219,924,724	56,176,214,210	71,365,273,973	90,661,188,207	115,174,378,091
	% Margin	5%	5%	5%	5%	5%
Depreciation & Amortization		16,374,376,536	20,744,304,092	26,296,931,473	33,352,016,934	42,315,776,193
EBIT		27,845,548,188	35,431,910,119	45,068,342,501	57,309,171,274	72,858,601,898

Source: Financial statement of ABCD, reproduced

Step IV(c): Complete Pro Forma Balance Sheet

The balance sheet is completed by linking the year-end balances for each debt instrument directly from the debt schedule. The remaining non-current and non-debt liabilities, captured in the other long-term liabilities line item, are held constant at the prior year level in the absence of specific management guidance (see Table 4.13 in million rupiah).

Table 4.13 PT ABCD Balance Sheet Post LBO
(in Rps, fiscal year ending December 31)

Description	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Cash and cash equivalent	12,814,813,863.79	13,424,264,121.27	84,402,201,686.21	172,554,062,301.35	332,220,786,147.89
Account Receivable	97,424,194,790.75	116,286,144,503.84	152,478,999,007.99	190,688,762,791.56	244,164,575,813.96
Inventories	453,830,353,253.00	453,830,353,253.00	453,830,353,253.00	453,830,353,253.00	453,830,353,253.00
Prepays and other current assets	7,934,793,379.00	7,934,793,379.00	7,934,793,379.00	7,934,793,379.00	7,934,793,379.00
Total Current Assets	572,004,155,286.54	591,475,555,257.12	698,646,347,326.20	825,007,971,724.91	1,038,150,508,593.85
Property, Plant, Equipment, net	202,038,279,904.00	202,038,279,904.00	202,038,279,904.00	202,038,279,904.00	202,038,279,904.00
Goodwill and Intangibe assets	9,688,499,934.54	9,494,729,935.85	9,304,835,337.13	9,118,738,630.39	8,936,363,857.78
Other Assets	19,530,868,727.00	19,530,868,727.00	19,530,868,727.00	19,530,868,727.00	19,530,868,727.00
Total Assets	803,261,803,852.08	822,539,433,823.96	929,520,331,294.33	1,055,695,858,986.30	1,268,656,021,082.63
Account Payable	262,945,753,124.02	254,291,472,977.08	373,704,027,946.80	442,570,384,365.09	582,671,944,563.10
Accured Liabilities	-	-	-	-	-
Other Current liabilities	-	-	-	-	-
Total Current Liabilities	262,945,753,124.02	254,291,472,977.08	373,704,027,946.80	442,570,384,365.09	582,671,944,563.10
Bank Credit Facilities	-	-	-	-	-
New Bank Credit Facility	50,000,000,000.00	50,000,000,000.00	-	-	-
Other Long Term Liabilities	-	-	-	-	-
Total Liabilities	312,945,753,124.02	304,291,472,977.08	373,704,027,946.80	442,570,384,365.09	582,671,944,563.10
Noncontrolling Intrest	-	-	-	-	-
Shareholder's Equity	490,316,050,728.06	518,247,960,846.89	555,816,303,347.53	613,125,474,621.22	685,984,076,519.53
Total Shareholders Equity	490,316,050,728.06	518,247,960,846.89	555,816,303,347.53	613,125,474,621.22	685,984,076,519.53
Total Liabilities and Equity	803,261,803,852.08	822,539,433,823.96	929,520,331,294.33	1,055,695,858,986.30	1,268,656,021,082.63

Source: Financial statement of PT ABCD, reproduced

Step IV(d): Complete Pro Forma Cash Flow Statement

To complete the cash flow statement, the mandatory and optional repayments for each debt instrument, as calculated in the debt schedule, are linked to the appropriate line items in the financing activities section and summed to produce the annual repayment amounts. The annual pro forma beginning and ending cash balances are then calculated accordingly. In 2010, PT ABCD is projected to generate Rp. 242,814,813,864 of free cash flow. This amount is first used to satisfy the Rp.5 billion mandatory minimum cash with the remaining cash used to make an optional repayment of Rp. 230 billion as shown in the Table 4.11 above.

STEP V. PERFORM LBO ANALYSIS

In order to perform an LBO analysis, four steps are taken which include:

Step V(a): Analyze Financing Structure

Step V(b): Perform Returns Analysis

Step V(c): Determine Valuation

Step V(d): Create Transaction Summary Page

The first thing to do is to use the LBO model use to evaluate various financing structures, gauge the target's ability to service and repay debt, and measure the PT XYZ's investment returns and other financial effects under multiple operating scenarios. This analysis is also useful for the banker to determine an appropriate return of the acquisition.

Step V(a): Analyze Financing Structure

An important part of LBO analysis is constructing of an optimal financing structure for the acquisition. From an acquisition perspective, this involves determining whether the ABCD's financial projections can support a given leveraged financing structure under various business and economic conditions. The use of financial projections is critical to assessing whether a given financial structure is viable.

Table 4.14 displays an output summarizing the PT ABCD's acquisition performance at the exit year 5. While the key financial data as well as pro forma capitalization for each year in the projection period is given in the Exhibit. This output is shown on a transaction summary page as follows:

Table 4.14 Summary Financial Data AT EXIT YEAR 2014

	Year 5 2014
Sales	2,106,670,070,997
% Sales Growth	27.04%
Gross Profit	494,585,958,271
% Gross Margin	23.48%
EBITDA	115,174,378,091
% EBITDA Margin	5.47%
Capital Expenditures	42,133,401,420
% Cap of Sales	2.00%
Free Cash Flow	
EBITDA	115,174,378,091
Less: Cash interest Expense	-
Plus: Interest Income	-
Less: Income Taxes	-
Less: Capital Expenditures	(42,133,401,420)
Less: Increase in Net Working Capital	-
Free Cash Flow	73,040,976,671
Cumulative Free Cash Flow	260,474,704,065

Source: Financial statement of PT ABCD, reproduced

For the PT ABCD LBO, it is performed a financing structure analysis on the basis of Average Case financial projections (see Step II) and assumed transaction structure (see Step III). Pro forma for the LBO, PT ABCD has a total capitalization of Rp.725 billion, comprised of the Rp. 280 billion loan, and Rp. 420 billion of shareholders' equity, and Rp. 25 billion cash for payment of fees and expenses).

This capital structure represents total leverage of 23,46 x 2009 EBITDA of Rp. 44,219,924,724. At these levels, PT ABCD has a debt-to-total capitalization of 38.62%. As would be expected for a company that is projected to grow EBITDA, generate sizeable free cash flow, and repay debt, PT ABCD's cash flows improve significantly over the projection period. By 2012, PT ABCD's debt is completely repaid as total leverage decreases to zero.

Step V(b): Perform Returns Analysis

After analyzing the contemplated financing structure from a debt repayment perspective, the management of PT XYZ determines whether it provides sufficient returns to the firm given the proposed purchase price and equity contribution. As discussed in Chapter 2, management of PT XYZ has sought 20%+ IRRs in assessing acquisition opportunities. If the implied returns are too low, both the purchase price and financing structure need to be revisited.

IRRs are driven primarily by the PT ABCD's projected financial performance, the assumed purchase price and financing structure, and the assumed exit multiple and year (assuming a sale). In this LBO analysis PT XYZ contemplates a full exit via a sale of the entire company in five years or in the year of 2014. In this LBO analysis, the calculation of Enterprise Value and Equity Value at Exit are shown in Table 4.15 below.

			Year 5 2014
Entry EBITDA Multiple		16.24	
Initial Equity Investment			
	EBITDA		115,174,378,091
Exit EBITDA Multiple		23.46	
	Enterprise Value at Exit		2,702,159,258,016
Less: Net Debt			
	Bank Credit Facility		-
	Total Debt		-
Less: Cash and cash equivalents			332,220,786,148
	Net Debt		(332,220,786,148)
	Equity value at Exit		2,369,938,471,868

Source: Financial statement of PT ABCD, reproduced

Step V(c): Determine Valuation

As discussed previously, the management of PT XYZ bases its valuation of an LBO target with realizing acceptable returns IRR of 20% or more at a given purchase price. Given this target, the LBO analysis provides a given set of financial projections, purchase price, and financing structure up to the exit multiple year 5 using the valuation methodologies provided. In this LBO analysis management of PT XYZ is also given some information for providing perspective on the price PT

XYZ might be willing to pay for PT ABCD's target in an organized sale process. The analysis of the LBO return is given in the following Table 4.16.

		Year 0 2009	Projection Period				
			Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Entry EBITDA Multiple	16.2	In million rupiah					
Initial Equity Investment		717,998					
		33,745	44,220	56,176	71,365	90,661	115,174
Exit EBITDA Multiple	23.5						
		791,706	1,037,464	1,317,976	1,674,334	2,127,044	2,702,159
Less: Net Debt							
Bank Credit Facility		280,000	50,000	50,000	-	-	-
		280,000	50,000	50,000	-	-	-
Less: Cash and cash equivalents		7,002	12,815	13,424	84,402	172,554	332,221
		272,998	37,185	36,576	(84,402)	(172,554)	(332,221)
		518,708	1,000,279	1,281,400	1,758,736	1,954,490	2,369,938
Return Analysis (Equity Value at Exit at Ini		0.72	1.39	1.78	2.45	2.72	3.30
		In Thousand Rp					
		Year 0 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Initial Equity Investment		-717.998485	-717.998485	-717.998485	-717.998485	-717.998485	-717.998485
Equity Proceeds		518.7075223	0	0	0	0	0
		0	1000.278883	0	0	0	0
		0	0	1281.400361	0	0	0
		0	0	0	1758.735842	0	0
		0	0	0	0	1954.489931	0
		0	0	0	0	0	2369.938472
IRR		-27.76%	18.03%	21.30%	25.10%	22.17%	22.02%
NPV at		(233,629,490)	20,589,009	86,565,549	214,883,907	179,118,155	214,430,916

Source: Financial statement of PT ABCD, reproduced

Step V(d): Create Transaction Summary Page

The last step in the LBO analysis is to provide to a transaction summary (see Table 4.17). This table provides an overview of summary returns analysis. This format allows the management of PT XYZ to quickly review and spot-check the analysis and make adjustments to the purchase price, financing structure, operating assumptions, and other key inputs as necessary in the Table 4.17 below.

Purchases Price		Return Analysis	
Offer Price per Share	1,250	Exit Year	2,014.00
Fully Diluted Shares	37,500,000	Entry Multiple	23.46
	46,875,000,000	Exit Multiple	23.46
Plus: Existing Net Debt	707,673,995,452	IRR	22%
Less Cash on Hand	36,550,510,452	Cash Return	72%
	717,998,485,000		
Transaction Multiples			
Enterprise Value / Sales	1.13		
Enterprise value EBITDA	23.46		

Source: Financial statement of PT ABCD, reproduced

4.3 Discussion on PT XYZ Acquisition Plan

In the above LBO analysis, it is shown that the PT ABCD provides:

1. IRR of 22% at the exit year 5
2. The NPV of positive Rp. 214,430,916,000.

These IRR and NPV of PT ABCD are obtained by using scenario assumptions as follows:

1. The average percentage of sales growth rate per year is 27%
2. The average percentage of cost of goods sales ratio per year is 76.5%
3. The average percentage of selling, general and administrative expenses is 6,2%
4. The average percentage of other expenses is 11.8%
5. The average percentage of EBIT to Sales is 4.7%, and
6. The average EBITDA multiple to Initial Investment is 23.46.

Using these assumption, the IRR and NPV are shown in Table 4.18 below.

Table 4.18 Return Analysis (Equity Value at Exit at Initial Investment)							
		0.72	1.39	1.78	2.45	2.72	3.30
		In Thousand Rp					
		Year 0 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Initial Equity Investment		-717,998,485	-717,998,485	-717,998,485.00	-717,998,485	-717,998,485	-717,998,485
Equity Proceeds		518,707,522	0	0.00	0	0	0
			1,000,278,883	0.00	0	0	0
				1,281,400,361.11	0	0	0
					1,758,735,842	0	0
						1,954,489,931	0
							2,369,938,472
IRR		-27.8%	18.0%	21.3%	25.1%	22.2%	22.0%
NPV at	16.11%	(233,629,490)	20,589,009	86,565,549	214,883,907	179,118,155	214,430,916

Source: Financial statement of PT ABCD, reproduced

In the next analysis, it is assumed that the scenario assumptions are changed as shown in the Table 4.19.

Table 4.19 The Alternative Scenario Assumptions

No.	Parameters of Scenarios	Scenario 2	Scenario 3	Scenario 4
1.	The average % of sales growth rate per year	-33.9%	70.6%	44.4%
2.	The average percentage of COGS ratio per year	75%	74%	80.6%
3.	The average % of Gen, Adm. & Selling expenses	1.8%	7.8%	8.9%
4.	The average percentage of other expenses	15.4%	13.3%	6.8%
5.	The average percentage of EBIT to Sales	5.3%	4.9%	3.8%
6.	The average EBITDA multiple to Initial Investment	21.28	15.22	33.88

Source: Financial statement of PT ABCD, reproduced

Using the same steps as discussed in Section 4.2 above beginning Step 2.a up to Step 5.d it can be presented the results of the LBO analyses under the above scenario assumptions as follows:

Table 4.20 The IRR and NPV under Four Scenario Assumptions

No.	Performance Measure	Scenario 1	Scenario 2	Scenario 3	Scenario 4
1.	IRR	22%	-9.2%	39%	35.7%
2.	NPV (Rp. Billion)	214	-477	1,202	954

Source: ABCD Financial Statements, reproduced.

By evaluating at the value of IRR and NPV at exit year 5, it shows that the return from the acquisition transaction by an LBO is large enough. So that acquiring PT ABCD by an LBO has become an alternative investments or a profitable business expansion.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

Based on the analysis and discussion given in Chapter 4, it can be concluded as follows:

- a. Of the companies in the automotive industry sector, PT ABCD is a good candidate for the target company to acquire. The reasons are that PT ABCD has some good financial performance, strong cash flow generation, a good growth opportunities, a low capital expenditure requirements, and proven management team. Based on the analysis of its financial aspect it also has provided an IRR of 22% which is above the expected required of the PT XYZ Management of 20% plus and high NPV.
- b. Given that PT XYZ does an LBO acquisition, the analyses necessary to be conducted consists of:
 - i. Collect the necessary information of the target company, primarily the historical financial statement.
 - ii. Build the pre LBO model which provides the basis for projecting cash flow statement of the target company.
 - iii. Construct the financing structure including the purchase price and source and uses of funds.
 - iv. Build the post LBO model which covers analyses of pro forma of balance sheet, pro forma income statement, and pro forma cash flow statement.
 - v. Perform an LBO analyses which provide information on the return analysis, an LBO valuation, and transaction summary.
- c. Given of the LBO analyses in the previous chapter it can be conclude that the acquisition of PT ABCD will provide an average return of 22% which is larger than the required return determined by the management of PT XYZ. The LBO analysis also gives a positive NPV of Rp. 214 billion at the end of year 5 of its exit in the acquisition. Accordingly, the acquisition transaction by an LBO is an alternative investments which is a profitable business for expansion.

5.2 Recommendation

Based on the above conclusion, it can be recommend to the management of PT XYZ as follows:

- a. The management of PT XYZ may use the above analyses as the basis for their evaluation for the acquisition of PT ABCD. However, as the analysis of the acquisition is based on the financial aspects only, the management of PT XYZ shall consider also analyses of other aspects such as legal, social economic, and regulation in order that the acquisition plan are warranted.
- b. The same recommendation also applies the banker for his/her analysis if he/she interested in providing a loan for the purchasing of PT ABCD.
- c. The above conclusion provide information that PT ABCD is a good candidate for the LBO acquisition in term of the financial aspect, and accordingly it is recommend that PT XYZ may consider PT ABCD as its alternative investment for expansion. Nonetheless, the management of PT XYZ shall not only base their analysis on this thesis as they need to analyse further some aspects of acquisition using an LBO.

5.3 Contribution

This thesis is expected to contribute or provide the following benefits:

- a. Management of PT XYZ may use this analysis as a basis their evaluation when they acquire target companies using LBO. In this analysis, it appears that PT ABCD is indeed a good target company for acquisition. Accordingly, the Management of PT XYZ may take some further steps to analyze other aspects other than the financial aspects so that they have complete information before they purchase the target company.
- b. Investors who identify that there will be an acquisition of a target company may use this analysis as a basis for their investment valuation. The investors may determine whether the acquisition is profitable and accordingly they can invest in the acquiring company's stocks. However, this analysis is merely based on the financial aspects. Other factors such as legal, social economic, and regulation need to be considered before making investment decisions. Other factor such tactic defense of the target company and the management may also be evaluated for such a good analysis.
- c. For students, this thesis provides an example of how an LBO analysis process is carried out so that by understanding this analysis, students can apply it in practice when they are in a

working world especially when they have to analyze merger acquisition in its financial aspects.



LIST OF LITERATURE

Amenc, N and Veronique L Sourd, (2003): *Portfolio theory and performance analysis*, John Wiley & Sons.

Copeland, T, T Koller, and Murrin, (2000), *Valuation: Measuring and managing the value of companies*, 3rd edition, New York, John Wiley & Sons.

Fabozzi, F. J, (1999): *Investment management*, second edition, Prentice Hall International, Inc

Gaughan, P. A,(2007): *Mergers, acquisitions, and corporate restructuring*, 4th edition, John Wiley & Sons, Inc.

Jensen, M.C (1986), *Agency Costs of Free Cash Flow. Corporate Finance and Take Overs*, American Economic Review 76.

Jensen, M.C (1991), *Corporate Control and the Politics of Finance*, Journal of Applied Corporate Finance.

Jensen, M. S. Kaplan, and L. Stiglin (1989), *The Effects of LBO's on Tax Revenue*, Tax Notes.

Kaplan, S (1989), *Management Buyout: Evidence on Taxes as a Source of Value*, Journal of Finance 44.

Moore, J. H and L R. Weatherford, (2001): *Decision modeling with microsoft excell*, Prentice Hall.

Officer, M.S (2003), *Termination Fees in Mergers and Acquisition*, Journal of Financial Economics

Olsen: (2005) *Merger and acquisition*.

Porter, M.E (1985), *Competitive Advantage*, New York, The Free Press.

Reilly, F. K, and K. C. Brown, (1997): *Investment analysis and portfolio management*, Fifth edition, The Dryden Press.

Rosenbaum, J and J Perl, (2009): *Investment banking - valuation, leveraged buyouts, and mergers & acquisitions*, John Wiley & Sons, Inc.

Ross, S. A, and R. W. Westerfield, J. Jaffe, and B. D. Jordan, (2008), *Modern financial management*, Eighth edition, McGraw Hill International Edition.

Sekaran, U (2000), *Research methods for business, a skill building approach*, Third Edition, John Wiley & Sons, Inc.

Stowe, J. D, T. R. Robinson, J. E. Pinto, and D. W. McLeavey, (2002): *Analysis of equity investments: valuation*, Association for Investment Management and Research

Tryfos, P, (1998): *Methods for business analysis and forecasting: text and cases*, John Wiley & Sons, Inc.

Walter, J.R, *Pooling or Purchase: A Merger Mystery*, (1991), Federal Reserve Bank of Richmond Economic Quarterly 85/1.

Weston, J Fred, and M. L. Mitchell, J. Harold Mulherin, (2004): *Takeovers, restructuring, and corporate governance*, 4th edition, Pearson Prentice Hall.

Weston, J. Fred and T. E. Copeland, (1992): *Managerial finance*, 9th edition, Fort Worth, TX,
The Dryden Press.



Value INDS LBO Income Statement
(in Rp, fiscal year ending December 31)

Income Statement		Pre LBO				Post LBO				
		2006	2007	2008	Pro Forma 2009	Income Statement Projection for the Period 2010 up to 2014				
		2006	2007	2008	Pro Forma 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Sales		390.975.793.831	564.440.846.044	963.198.182.833	636.684.356.428	808.832.602.370	1.027.526.704.642	1.305.351.843.704	1.658.296.011.347	2.106.670.070.997
	% growth	0,0%	44,4%	70,6%	-33,9%	27,0%	27,0%	27,0%	27,0%	27,0%
Cost of Goods Sold		353.075.156.320	454.717.479.966	712.558.096.820	477.701.247.036	618.941.810.627	786.292.784.409	998.892.516.547	1.268.975.475.037	1.612.084.112.726
Gross Margin	% Margin	9,7%	19,4%	26,0%	25,0%	23,5%	23,5%	23,5%	23,5%	23,5%
Selling, General & Administrative		46.443.510.158	50.348.616.408	74.921.138.257	11.603.271.363	49.934.391.782	63.435.772.601	80.587.689.203	102.377.182.223	130.058.170.717
	% Sales	11,9%	8,9%	7,8%	1,8%	6,2%	6,2%	6,2%	6,2%	6,2%
Other (Expenses) / Income		12.897.791.526	-38.184.409.869	-128.556.311.741	-98.032.294.004	(95.736.475.238)	(121.621.933.422)	(154.506.363.980)	(196.282.165.879)	(249.353.409.463)
EBITDA		4.354.918.879	21.190.339.801	47.162.636.015	33.744.956.649	44.219.924.724	56.176.214.210	71.365.273.973	90.661.188.207	115.174.378.091
	% Margin	1,1%	3,8%	4,9%	5,3%	5,5%	5,5%	5,5%	5,5%	5,5%
Depreciation & Amortization		0,0%	0,0%	0,0%	0,0%	16.374.376.536	20.744.304.092	26.296.931.473	33.352.016.934	42.315.776.193
EBIT		4.354.918.879	21.190.339.801	47.162.636.015	33.744.956.649	27.845.548.188	35.431.910.119	45.068.342.501	57.309.171.274	72.858.601.898
Interest		-	-	-	-	42.000.000.000	7.500.000.000	7.500.000.000	-	-
Credit Fees		-	-	-	-	1.400.000.000	-	-	-	-
Net Income Before Tax		-	-	-	33.744.956.649	(15.554.451.812)	27.931.910.119	37.568.342.501	57.309.171.274	72.858.601.898
		-	-	-	-	16.176.652.047	20.550.534.093	26.107.036.874	33.165.920.227	42.133.401.420

Initial Investment

! 717.998.485.000 !

Income statement Assumptions

Sales (% YoY Growth)	44,4%	70,6%	-33,9%	27,0%	27,0%	27,0%	27,0%	27,0%	27,0%
COGS (% Margin)	80,6%	74,0%	75,0%	76,5%	76,5%	76,5%	76,5%	76,5%	76,5%
SG&A (% Sales)	8,9%	7,8%	1,8%	6,2%	6,2%	6,2%	6,2%	6,2%	6,2%
Other Expense / (Income) (% of sales)	6,8%	13,3%	15,4%	11,8%	11,8%	11,8%	11,8%	11,8%	11,8%
EBIT to Sales	3,8%	4,9%	5,3%	4,7%	4,7%	4,7%	4,7%	4,7%	4,7%

EBITDA Multiple to Initial Investment

33,88 15,22 21,28 23,46
 Asumsi 4 Asumsi 3 Asumsi 2 Asumsi 1
 Average 3 Years

(in Rp, fiscal year ending December 31)

INDS Balance Sheet	Pre LBO				Post LBO					
	Opening 2008	Pro Forma 2009	Debit Adjustment	Credit Adjustment	Pre-LBO 8/5	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Cash and cash equivalent	21.942.239.333,0	36.550.510.452	7.001.515.000	36.550.510.452	7.001.515.000	12.814.813.864	13.424.264.121	84.402.201.686	172.554.062.301	332.220.786.148
Account Receivable	85.958.307.916	85.648.467.854			85.648.467.854	97.424.194.791	116.286.144.504	152.478.999.008	190.688.762.792	244.164.575.814
Inventories	250.604.151.066,0	453.830.353.253			453.830.353.253	453.830.353.253	453.830.353.253	453.830.353.253	453.830.353.253	453.830.353.253
Prepays and other current ass	43.149.788.572	7.934.793.379			7.934.793.379	7.934.793.379	7.934.793.379	7.934.793.379	7.934.793.379	7.934.793.379
Total Current Assets	401.654.486.887	583.964.124.938			554.415.129.486	572.004.155.287	591.475.555.257	698.646.347.326	825.007.971.725	1.038.150.508.594
Property, Plant, Equipment, ne	210.861.484.028,0	202.038.279.904			202.038.279.904	202.038.279.904	202.038.279.904	202.038.279.904	202.038.279.904	202.038.279.904
Goodwill and Intangibe assets	14.119.427.439	9.886.224.423			9.886.224.423	9.888.499.935	9.494.729.936	9.304.835.337	9.118.738.630	8.936.363.858
Other Assets	12.813.569.436	19.530.868.727			19.530.868.727	19.530.868.727	19.530.868.727	19.530.868.727	19.530.868.727	19.530.868.727
Total Assets	639.448.961.790	815.419.497.992			785.870.502.540	803.261.803.852	822.539.433.824	929.520.331.294	1.055.695.858.986	1.268.656.021.083
Account Payable	299.844.595.228	137.392.715.783	137.392.715.783		0	262.945.753.124	254.291.472.977	373.704.027.947	442.570.384.365	582.671.944.563
Accured Liabilities	190.553.304	338.035.992.168	338.035.992.168		0	0	0	0	0	0
Other Current liabilities	64.720.866.149	49.109.723.801	49.109.723.801		0	0	0	0	0	0
Total Current Liabilities	364.756.014.681	524.538.431.752			0	262.945.753.124	254.291.472.977	373.704.027.947	442.570.384.365	582.671.944.563
Bank Credit Facilities	179.589.644.644	169.141.321.244	169.141.321.244		0	0	0	0	0	0
New Bank Credit Facility	0,0	0	0	280.000.000.000	280.000.000.000	50.000.000.000	50.000.000.000	0	0	0
Other Long Term Liabilities	10.326.888.349	13.873.738.681	13.873.738.681		0	0	0	0	0	0
Total Liabilities	554.672.547.473	707.553.491.677			280.000.000.000	312.945.753.124	304.291.472.977	373.704.027.947	442.570.384.365	582.671.944.563
Noncontrolling Intrst	0	120.503.775	120.503.775		0	0	0	0	0	0
Shareholder's Equity	84.776.414.317	107.745.502.540	46.875.000.000	445.000.000.000	505.870.502.540	490.316.050.728	518.247.960.847	555.816.303.348	613.125.474.621	685.984.076.520
Total Shareholders Equity	84.776.414.317	107.866.006.315			505.870.502.540	490.316.050.728	518.247.960.847	555.816.303.348	613.125.474.621	685.984.076.520
Total Liabilities and Equity	639.448.961.790	815.419.497.992			785.870.502.540	803.261.803.852	822.539.433.824	929.520.331.294	1.055.695.858.986	1.268.656.021.083
Balance check	0,00	0,00	761.550.510.452	761.550.510.452	0,00	0	0	0	0	0
		22.969.088.223								



Balance Sheet Assumptions

Current Asset		
Days Sales Outstanding (DSO)	49,28	38,65
Days Inventory Held (DIH)	191,48	267,63
Prepaid and other current asse	1,0%	1,0%
Capital Expenditures (% of sales)	2,0%	2,0%
Depreciation (% of sales)	2,0%	2,0%
Amortization (% of Book Value Goodwill)	2,0%	2,0%
Current Liabilities		
Days A/P to Sales Outstanding	229,10	81,02
Accrued Liabilities (% of sales)	10,0%	10,0%
Other Current Liabilities (% of s	2,5%	2,5%

	43,96	41,31	42,64	41,97	42,30
	229,56	249	239,07	243,83	241,45
	1,0%	1,0%	1,0%	1,0%	1,0%
	2,0%	2,0%	2,0%	2,0%	2,0%
	2,0%	2,0%	2,0%	2,0%	2,0%
	2,0%	2,0%	2,0%	2,0%	2,0%
	155,00	118,04	136,55	127,30	131,93
	10,0%	10,0%	10,0%	10,0%	10,0%
	2,5%	2,5%	2,5%	2,5%	2,5%

Cash Balance Calculation

	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Cash Collection Year on Sales	711.408.407.580	911.240.560.138	1.152.872.844.696	1.467.607.248.556	1.862.505.495.183
Cash Collection from Past Year Sales	85.648.467.854	97.424.194.791	116.286.144.504	152.478.999.008	190.688.762.792
Total Cash Collection	ok 797.056.875.434	1.008.664.754.929	1.269.158.989.199	1.620.086.247.564	2.053.194.257.974
Purchase of Inventory	355.996.057.503	532.001.311.432	625.188.488.600	826.405.090.672	1.029.412.168.163
Purchase of Inventory Last Year	ok -	262.945.753.124	254.291.472.977	373.704.027.947	442.570.384.365
Plant and Equipment	16.176.652.047	20.550.534.093	26.107.036.874	33.165.920.227	42.133.401.420
General and Selling Expenses	49.934.391.782	63.435.772.601	80.587.689.203	102.377.182.223	130.058.170.717
Other Expenses	95.736.475.238	121.621.933.422	154.506.363.980	196.282.165.879	249.353.409.463
Total Disbursement	517.843.576.570	1.000.555.304.671	1.140.681.051.634	1.531.934.386.949	1.893.527.534.128
Cash Beginning Balance	7.001.515.000	12.814.813.864	13.424.264.121	84.402.201.686	172.554.062.301
Surplus/Defisit Cash	279.213.298.864	8.109.450.257	128.477.937.565	88.151.860.615	159.666.723.847
Cash Ending Balance	286.214.813.864	20.924.264.121	141.902.201.686	172.554.062.301	332.220.786.148
Accrued Payment	273.400.000.000	7.500.000.000	57.500.000.000	-	-
Cash Ending Balance Policy	12.814.813.864	13.424.264.121	84.402.201.686	172.554.062.301	332.220.786.148 ok
Equity					
Beginning	808.832.602.370	1.027.526.704.642	1.027.526.704.642	1.305.351.843.704	1.658.296.011.347
Net Income	618.941.810.627	786.292.784.409	786.292.784.409	998.892.516.547	1.268.975.475.037
Ending Equity	490.316.050.728	518.247.960.847	518.247.960.847	555.816.303.348	613.125.474.621
	27.931.910.119	37.568.342.501	37.568.342.501	57.309.171.274	72.858.601.898
	518.247.960.847	555.816.303.348	555.816.303.348	613.125.474.621	685.984.076.520



(in Rps, fiscal year ending December 31)

INDS Cash Flow Statement	Projection Period					
	Year 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Operating Activities						
Net Income	33.744.956.649	(15.554.451.812)	27.931.910.119	37.568.342.501	57.309.171.274	72.858.601.898
Plus: Depreciation & Amortization	-	16.374.376.536	20.744.304.092	26.296.931.473	33.352.016.934	42.315.776.193
Changes in Working Capital Items						
(Inc) / Dec. in Account Receivables	309.840.062	(11.775.726.937)	(18.861.949.713)	(36.192.854.504)	(38.209.763.784)	(53.475.813.022)
(Inc) / Dec. in Inventories	(203.226.202.187)	-	-	-	-	-
(Inc) / Dec. in Prepaid and other current assets	35.214.995.193	-	-	-	-	-
(Inc) / Dec. in Account Payable	(162.451.879.445)	262.945.753.124	(8.654.280.147)	119.412.554.970	68.866.356.418	140.101.560.198
(Inc) / Dec. in Accured Liabilities	337.845.438.864	-	-	-	-	-
(Inc) / Dec. in Other Current Liabilities	(15.611.142.348)	-	-	-	-	-
Cash Flow From Operating Activities	25.826.006.788	251.989.950.911	21.159.984.350	147.084.974.439	121.317.780.842	201.800.125.266
Investing Activities						
Capital Expenditures	(8.823.204.124)	(16.374.376.536)	(20.550.534.093)	(26.107.036.874)	(33.165.920.227)	(42.133.401.420)
Other Investing Activities	2.484.102.275	197.724.488	-	-	-	-
Cash Flow From Investing Activities	(6.339.101.849)	(16.176.652.047)	(20.550.534.093)	(26.107.036.874)	(33.165.920.227)	(42.133.401.420)
Financing Activities						
Bank Credit Facilities	(10.448.323.400)	(230.000.000.000)	-	(50.000.000.000)	-	-
Other Long Term Liabilities	3.546.850.533	-	-	-	-	-
Noncontrolling Intrest	120.503.775	-	-	-	-	-
Equity Issuance / (repurchase)	(10.775.868.426)	-	-	-	-	-
Cash Flow From Financing Activities	(17.556.837.518)	(230.000.000.000)	-	(50.000.000.000)	-	-
Excess Cash for the Period	14.608.271.119	5.813.298.864	609.450.257	70.977.937.565	88.151.860.615	159.666.723.847
Beginning Cash Balance	21.942.239.333	7.001.515.000	12.814.813.864	13.424.264.121	84.402.201.686	172.554.062.301
Ending Cash Balance	36.550.510.452	12.814.813.864	13.424.264.121	84.402.201.686	172.554.062.301	332.220.786.148

(in Rps, fiscal year ending December 31) PT INDS

Debt Schedule

	Projection Period					
	Pro Forma 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Lending Rate	15,00%	15,00%	15,00%	15,00%	15,00%	15,00%
Cash Flow From Operating Activities		251.989.950.911	21.159.984.350	147.084.974.439	121.317.780.842	201.800.125.266
Cash Flow from Investing Activities		-16.176.652.047	-20.550.534.093	-26.107.036.874	-33.165.920.227	-42.133.401.420
Cash Available for Debt Repayment		235.813.298.864	609.450.257	120.977.937.565	88.151.860.615	159.666.723.847
Cash Mandatory for B/S (Minimum)		5.000.000.000	5.000.000.000	5.000.000.000	5.000.000.000	5.000.000.000
Cash from Balance Sheet		7.001.515.000	12.814.813.864	13.424.264.121	84.402.201.686	172.554.062.301
Cash Available for Optional Debt Repayment		242.814.813.864	13.424.264.121	134.402.201.686	172.554.062.301	332.220.786.148
Bank Credit Facility						
Credit Facility Size	280.000.000.000					
Lending Rate	15,00%					
Term	5 Years					
Commitment Fee on Unused Po	0,50%					
Beginning Balance		-	50.000.000.000	50.000.000.000	-	-
Drawdown	280.000.000.000	0	-	-	-	-
Repayment		230.000.000.000	-	50.000.000.000	-	-
Credit Bank Ending Balance		50.000.000.000	50.000.000.000	-	-	-
Interest Rate	15,00%	15,00%	15,00%	15,00%	15,00%	15,00%
Interest Expense		42.000.000.000	7.500.000.000	7.500.000.000	-	-
Commitment Fee		1.400.000.000	-	-	-	-
Repayment of Debt & Non Controlling Interest		744.224.505.904				
Cash Handed	25.000.000.000					
Cash from equity Contribution	420.000.000.000					
Total Cash Received Pre LBO	725.000.000.000					
Cash Balance after Debt Repayment		12.814.813.864	13.424.264.121	84.402.201.686	172.554.062.301	332.220.786.148
		12.814.813.864	13.424.264.121	84.402.201.686	172.554.062.301	332.220.786.148
		0	-	-	-	-

Purchase Price	
INDS Target Company	
Entry EBITDA Multiple (Times)	16,24
EBITDA 2009	44.219.924.724
Enterprise Value	717.998.485.000
Less: Total Debt	707.553.491.677
Less: Preferred Securities	-
Less: Minority Interest	120.503.775
Plus: Cash and Cash Equivalents	36.550.510.452
Equity Purchase Price	46.875.000.000

Calculation of Weighted Average Cost of Capital			
		Cost of Capital	Weighted C o Capital
Total Debt Financing	280.000.000.000	15%	3,90%
Total Equity Financing	420.000.000.000	20%	12,21%
	700.000.000.000		
Tax Rate	35,0%		
Weighted Average Cost of Capital			16,11%

(in Rps, fiscal year ending December 31)

Return Analysis		Projection Period						
		Pro Forma 2008	Year 0 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Entry EBITDA Multiple	23,46							
Initial Equity Investment	717.998.485.000							
EBITDA		33.744.956.649	44.219.924.724	56.176.214.210	71.365.273.973	90.661.188.207	115.174.378.091	
Exit EBITDA Multiple	23,46							
Enterprise Value at Exit		791.706.007.290	1.037.464.069.372	1.317.976.096.985	1.674.333.640.561	2.127.043.992.928	2.702.159.258.016	
Less: Net Debt								
Bank Credit Facility		280.000.000.000	50.000.000.000	50.000.000.000	0	0	0	
Total Debt		280.000.000.000	50.000.000.000	50.000.000.000	0	0	0	
Less: Cash and cash equivalents		7.001.515.000	12.814.813.864	13.424.264.121	84.402.201.686	172.554.062.301	332.220.786.148	
Net Debt		272.998.485.000	37.185.186.136	36.575.735.879	-84.402.201.686	-172.554.062.301	-332.220.786.148	
Equity value at Exit		518.707.522.290	1.000.278.883.236	1.281.400.361.106	1.758.735.842.247	1.954.489.930.626	2.369.938.471.868	

Return Analysis (Equity Value at Exit at Initial Investment) 0,72 1,39 1,78 2,45 2,72 3,30

	In Thousand Rp					
	Year 0 2009	Year 1 2010	Year 2 2011	Year 3 2012	Year 4 2013	Year 5 2014
Initial Equity Investment	-717.998.485	-717.998.485	-717.998.485,00	-717.998.485	-717.998.485	-717.998.485
Equity Proceeds	518.707.522	0	0,00	0	0	0
		1.000.278.883	0,00	0	0	0
			1.281.400.361,11	0	0	0
				1.758.735.842	0	0
					1.954.489.931	0
						2.369.938.472

IRR -27,8% 18,0% 21,3% 25,1% 22,2% 22,0%

NPV at 16,11% (233.629.490) 20.589.009 86.565.549 214.883.907 179.118.155 214.430.916