

**Department of Economics** 

# Leveraged Buyout

- A Case Study on Unibet Group Plc

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# **Abstract**

Leveraged buyout (LBO) is an acquisition where the company is taken out of the public market, becomes private and through different strategies give a satisfactory return to the investors. This specific buyout, known to be highly financed with debt, has been both loved and detested since it first was introduced. However, the amount of LBO transactions has increased in Europe over the last two decades and is now a common part in the investment bank's daily work.

In this thesis, the online gambling company Unibet Group Plc is the target company which I study. The main goal is to come to a conclusion on whether or not Unibet is a suitable candidate for a leveraged buyout. The framework of this thesis contains two different approaches; to search for the characteristics of a well suited LBO candidate in Unibet Group Plc., and secondly to create the LBO valuation model and analyze Unibet Group Plc's prospects of being a good investment.

As it appears, Unibet has many of the characteristics of a well suited LBO candidate; high level of free cash flow, low capital expense requirements, growth opportunity, low financial distress costs and strong asset base. From my self- designed LBO model I can deduce that with the given debt levels, Unibet will be able to repay the loan plus interest expenses and at the same time be able to give satisfactory return on the investment.

# **Table of Contents**

1.	ı	Introduct	ion	1
	1.1	l. Purp	oose and thesis questions	2
	1.2	2. Limi	tations	2
2.	١	Method		2
3.	-	Theory		3
	3.1	L. LBO	- background	3
	3	3.2. Fi	rm value post- LBO	4
	3	3.3. Ch	naracteristics of a well-suited LBO candidate	5
	3	3.3.1.	Strong cash flow	6
	3	3.3.2.	Low Tobin's q	6
	3	3.3.3.	Low financial distress costs	6
	3	3.3.4.	Market position	6
	3	3.3.5.	Growth opportunity	6
	3	3.3.6.	Efficiency opportunities	7
	3	3.3.7.	Low capital expenditures	7
	3	3.3.8.	Strong asset base	7
	3	3.3.9.	Strong management	7
	3	3.3.10.	Conclusion	8
	3.4	l. The	LBO model	8
	3	3.4.1.	Historical and projected income statement	8
	3	3.4.2.	Balance sheet and projected balance sheet items	9
	3	3.4.3.	Cash flow statement through investing activities	9
	3	3.4.4.	Purchase price assumptions	9
	3	3.4.5.	Financing structure	9
	3	3.4.6.	Build debt schedule	0
	3	3.4.7.	Return analysis	0
	3	3.4.8.	Linked lines	1
	3.5	5. Fina	ncing the LBO1	1
	3	3.5.1.	Bank debt	2
	3	3.5.2.	High yield bonds	2
	3	3.5.3.	Mezzanine debt	2
1		Empirical	results 1	2

4.	1.	Unib	et Group Plc	13
4.	2.	Marl	ket analysis for Online Gambling	14
4.	3.	LBO-	Characteristics in Unibet	15
4.	4.	The	LBO Model	16
	4.4.2	1	Income Statement	17
	4.4.2	2. Cas	h Flow Statement	18
	4.4.3	3. Pur	chase Price	18
	4.4.4	4. The	Financial Structure	19
	4.4.5	5. Del	ot schedule	20
	4.4.6	6. Ret	urn Analysis- Financial structure 1	21
	4.4.7	7. Sen	sitivity Analysis	22
	4.4.8	8. Ret	urn analysis- Financial structure 2	23
	4.4.9	9. The	complete LBO model	25
5.	Anal	lyze o	f Results	27
5.	1.	Char	acteristics in Unibet	27
5.	2.	LBO	analysis	27
	5.2.2	1.	Financial structure	27
	5.2.2	2.	Debt Schedule	27
	5.2.3	3.	Return Analysis	28
6.	Con	clusio	n	28
7.	Disc	ussio	n and Future Research	29
8.	Refe	erence	25	30

# Wordlist

Capex= Capital expenditures

CMBOR= Centre for Management Buy-Out Research

DCF- valuation = Discounted Cash Flow- valuation

Due diligence= Investigation of a target company and its assets made by investment banks

EBITDA= Earnings before interest rates, taxes, depreciation and amortizations

EBIT= Earnings before interest rates and taxes

Exit= When the company sells after a couple of years. Can either remain private or go public.

Exit multiple= The expected enterprise value at exit divided by the expected EBITDA value at exit

Fully diluted shares outstanding= Amount of outstanding common stocks, if all bonds and preferred stocks that is exchangeable at the option of the holder were converted to common shares.

**GBP= Great Britain Pound** 

Investor= Buyer who contributes with equity

IRR= Internal Rate of Return, measures the profitability of the investment

LBO= Leveraged Buyout

**OG= Olympic Games** 

Sponsors= E.g. investment bankers

WC= World Championship

# 1. Introduction

Leverage buyout is a financial transaction which became very popular in the United States during the 1980s, and have since then been more and more popular around the world (Kaplan and Söderström, 2009). LBO diverges from other types of acquisitions because of the amount of debt included in the purchase and that the company is taken out of the market in order to become private.

LBO opens for the possibility to acquire a company without having capital enough to pay the whole purchase price. During the 1980<sup>th</sup> up to 90% of the purchase price could be financed with debt, but today we see levels between 50% and 75% due to the higher requirements from the sources (banks, high yield bonds etc.). The idea behind the high debt level is that the acquired company's free cash flow will be able to pay for the debt repayments and interest rates during the period you hold the company. The company is also meant to be sold, exit, in 5-7 years of time after the acquisition in order to get the return on the investment. The LBO is also used by other companies with the intension to make the company more efficient and to obtain a lower tax shield through increased debt (Muscarella and Vetsuypens, 1990, John R. Graham, 2003).

The figure below shows the global private equity transaction volume during 1985–2006.

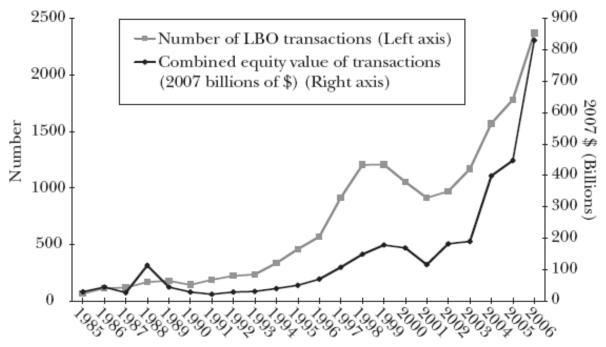


Figure 1 (Source: Kaplan and Strömberg, 2009)

The LBO valuation model is created by a team in an investment bank who works for the buyer or the seller. Their job is to present how different purchase prices, financial structures, debt schedules and expected growth rates will affect the return on the invested capital. As the amount of LBO companies has increased during the years, so has the significance of LBO models. All investment banks normally have their own model which can differ depending on what sort of company and/ or inside

information. Due to the competiveness between them, the model is kept secret. However, the idea is still the same.

Unibet Group Plc., one of Europe's largest online sport betting and gambling companies, could be an interesting target for LBO with high revenue and low research and development costs. Its qualifications are further investigated in this thesis.

# 1.1. Purpose and thesis questions

The purpose of this thesis is to create a leveraged buyout valuation model and apply it to Unibet Group Plc. The aim is also to investigate whether Unibet Group Plc. is an appropriate candidate for a leveraged buyout or not.

The thesis aim is to find answers to the following questions:

- What is the gain of using LBO and what are the risks?
- Are some companies more appropriate for LBO than others?
- Can Unibet Group Plc be a good candidate for an LBO?
- How is the LBO valuation model created?
- How is the LBO financed?

# 1.2. Limitations

Since I don't have any inside information it won't be possible to make a perfect valuation model or get information about how well the management is performing. Therefore, some assumptions need to be done.

I take a buyer's approach, which has no other company in the same business, but has the experience and capital needed in order to reach the bank's requirements. Therefore, I won't be investigating the financial situation of the buyer. I will briefly discuss how the investors finance the LBO and instead focus on the valuation model. This thesis will not stretch to study different exit strategies.

I will use the LBO valuation model available in literature. Since the LBO model can differ quite a lot between companies and industries and especially because of investment banks unwillingness to share such valuable information, there are limitation in the practical valuation part. However, the thesis aim is to give the most trustful and reliable valuation possible.

Notice that this thesis purpose is mainly about investigating leveraged buyout and not to be seen as a complete valuation of the company. We won't be performing the DCF model or any other valuation models other than the LBO.

# 2. Method

The thesis is based on facts from well recognized as well as new and modern articles and books. Public information available from Unibet Group Plc, such as the annual report is used. Relevant information from Avanza bank and Financial Times is also taken into consideration.

Many articles and previous work on LBO provide useful information on how LBO has been used since the 1980<sup>s</sup> when it first was introduced. However, the practical part was best presented by Rosenbaum and Pearl (2009). In order to perform an LBO valuation model I had to create my own in

Excel. I collected information about past and expected performance from Unibet's annual reports, the Financial Times and Avanza Bank. All items, necessary for the LBO- model, are not to be found in the annual report, which is why further calculations had to be done. The income statement, balance sheet and cash flow had to be collected from four years back in order to calculate estimates for the following year's revenue growth, EBITDA growth etc. I have piece by piece inserted all the items into Excel.

When creating the LBO- model in Excel you need to link all items and sheets to each other, because we want to see what is happening to the IRR when for example the debt level or expected growth is changing. By changing one item, the linked sheets change by themselves and in a second you will get the answer to how much better or worse IRR you receive on the investment. It takes a great amount of time and effort to create the LBO- model and the linked system, but do certainly pay off.

Both the future of the gambling industry and the characteristics of Unibet as a suited LBO- candidate are investigated. Information and news from Financial Times analysts and other public available sources is collected.

# 3. Theory

# 3.1. LBO- background

Leveraged buyout became very popular during the 1980<sup>th</sup> in the United States. During those ten years, 2000 LBO's were made with a value exceeding \$250 billion. Unfortunately, the big boom had consequences since the risks with LBO were ignored by many.

Leveraged buyout means an acquisition of a company which is financed mostly with debt. It gives investors who earlier never would have had a chance to buy a big company the opportunity to finance with only a small amount of equity and let the bank and other high yield bonds or mezzanine debt pay the rest. The loan repayment and interest rates is paid with cash flow from the acquired company's free cash flow. This is thoroughly explained later on in this thesis.

High yield bonds and mezzanine debt has lower requirements than the bank loan. This implies that investors having high yield bonds or mezzanine debt are less suitable for having big loans. Naturally, the interest rates therefore are higher for such investors.

The problem occurs when the company doesn't succeed as the investors had planned. Suddenly, the loan repayments and interest rates get too high, the cash flow doesn't cover them and bankruptcy is a fact. That's what happened to many companies in the end of 1980<sup>th</sup> and the main reason why LBO got such a bad reputation. At that time it was acceptable to finance up till 90% of the purchase price with debt. Later on, restrictions were imposed which allowed around 50-70% to be debt financed.

It took many years before it became popular in Europe due to the problems in the United States. The LBO market grew from approximately 10 billion Euros in 1993 to 176.9 billion Euros in 2007 (CMBOR, 2008). Leveraged buyout is definitely in the spotlight.

This table, an extract from Kaplan and Strömberg (2009), shows how the % combined enterprise value in different parts of the world change in relation to each other for different time periods. It clearly shows the allocation changes. During 1985- 1989, 87% of the enterprise value within LBO transactions occurred in the United States and Canada. At the same time only 3% of the total

enterprise value within LBO transactions occurred in Europe. For every new period there is an allocation change from the United States towards Europe. Now, it should not be seen as a decrease of LBO in the United States but rather a big increase in Europe. However, Asia and Australia have not been very keen to follow the same development as Europe.

Time period	1985-1989	1990-1994	1995-1999	2000-2004

United	87%	72%	60%	44%
States and				
Canada				
United	7%	13%	16%	17%
Kingdom				
Western	3%	13%	20%	32%
Europe				
(exept UK)				
Asia and	3%	1%	2%	4%
Australia				

Table 1 (Source: Kaplan and Strömberg, 2009)

# 3.2. Firm value post- LBO

There have been many discussions whether LBO increases or decreases the value of large firms since the big "restructuring boom" during the 80s (Wiersema and Libeskind, 1995).

According to Jensen (1986 and 1989) LBO works as both a "carrot" and "stick" mechanism to improve the company's cash flow as well as reducing costs. It is commonly known as "Jensen's incentive-intensity hypothesis". As the management's ownership increase, so does their willingness to improve and deliver good results, which is why the metaphor carrot is commonly used. The high debt level and interest rate payments work as a "stick" in order to force the management to work harder and make the company more efficient. Further on Jensen (1986) argues that the total debt level is not as important as the "debt service payment" per period in order to give incentive for the managers to work harder. Studies made by George P. Bakera and Karen H. Wruck, 1989, Smith and Warner, 1979; Begley, 1990; and Gilson and Warner, 1996 agree with Jensen that shorter maturity time, thus higher payment per period, increase the incentive for the managers to work harder. Since banks have higher requirements and shorter maturity time in comparison to alternatives such as "junk" bonds, debt has a more efficient role to push the management when the LBO is financed by private or senior bank loans.

Three different studies made by Kaplan (1989), Muscarella and Vetsuypens (1988), and Smith (1989) examined large samples of leveraged buyout companies during the 1980<sup>th</sup>. They focused on operating performance after the buyout and found that the median equity ownership by management was 22,6% according to Smith and 16,7% according to Kaplan. All of three studies indicate that after two to four years, operating income increases by 40%.

DeAngelo and DeAngelo (1987), Lehn and Poulsen (1989) and other studies made, find the same results; LBO leads to an increase of the market value and higher operating profits.

Smith (1989) investigated how the managers change the expenditures after the LBO in order to pay for the debt repayments and interest rates as well as increase the value of the company. Smith found

reduction in both days receivables and inventories, indicating that managers take a closer look at working capital expenditures after leverage buyout. Since there was no proof of reduced research & development expenditures Smith concluded that managers care for the future of the company and do not act short sighted.

Decisions made by managers in form of expanding and investment alternatives are crucial to the value of the firm. If managers underinvest there is a good chance of losing market shares and benefits from economics of scale (Grant, 1989). If the company instead overinvest it will lose value because of the overcapacity.

An article written by Wiersema and Liebeskind (1995) concludes after an investigation on corporate growth in large U.S. firms during the 1980s, in comparison to public firms, that the growth rate is significantly lower when it comes to employee and sales growth. The article also shows evidence that post-buyout firm not only down- sized but divested both core and periphery business. These findings are consistent with Jensen's (1989) incentive-intensity hypothesis which argues that a LBO will work as an incentive for the managers to work harder because of their increased ownership and debt payments. In order to increase incoming cash flow and decrease costs the firm is most likely in need of reductions. Such reductions would never to be made by the managers when being public. Jensen further argues that LBO reduces the managers' possibilities of making profitless investments, thus LBO will increase the value of the firm.

However, an article by Rappaport (1990) argues that the empirical evidence, which many of these important studies mentioned above are based on, can be misleading. The managers are under big pressure because of the high debt payments and the need of showing firm value increase. Under those circumstances it is possible to only care for the short run. There is a good chance of squeezing cash from current operations which in the long run can lead to default. Both theoretical evidence given in articles such as Wernerfelt (1984) as well as empirical evidence in articles as Morck, Shleifer and Vishny (1990) indicates that LBO is a short sighted way of increasing the firm value.

## 3.3. Characteristics of a well-suited LBO candidate

Some of the determinants for undertaking LBO are the incentive gain and the potential financial distress costs. These can differ due to the characteristics of the company. Hilary B. Miller (1978), as well as many other studies, argues that some companies are more appropriate to LBO than others. The determination of an appropriate candidate is simply based on the characteristics of the company.

We summarize the characteristics from Rosenbaum and Pearl (2009); Opler and Titman (1993) and Miller (1978) in the following way:

- Strong cash flow
- Low Tobin's q
- Low financial distress costs
- Leading and defensible market position
- Growth opportunity
- Efficiency opportunities
- Low capital expenditures requirement
- Strong asset base

#### Strong management

## 3.3.1. Strong cash flow

Having a stable incoming cash flow is crucial for potential LBO firms. Because of the periodic interest payments and debt repayment the debt investors always want to make sure the firm has the ability to generate enough cash flow. Both buyers and debt investors (usually the bank) investigate the cash flow through due diligence. In order to be prepared for fluctuations due to the economy or firm-specific reasons, they usually run three different scenarios; better than expected, as expected, worse than expected. The bank usually requires the firm to be able to generate enough cash flow in order to pay for the interest rates and debt repayment even during down periods. (Rosenbaum and Pearl, 2009)

## 3.3.2. Low Tobin's q

Tobin's q is a measure used in Lehn, Netter, and Poulsen, (1990) and is defined as the ratio of the market value of a firm's assets to current replacement cost of the firm's assets. Tobin's  $q = (A_{mv}/A_{crc})$  where  $A_{mv}$  is equal to the market value of a firm's assets and  $A_{crc}$  equals current replacements costs of the firm's assets. If Tobin's q is equal to 1; the market value is perfectly reflecting the recorded assets of the company. If it is higher than 1; the market value is higher than the recorded assets and indicates there are some unmeasured assets but also that the company uses resources effectively. Therefore the company will invest in capital under these circumstances. If Tobin's q is below 1; the company does not use the resources effectively, the market value is now lower than the recorded assets and the company is undervalued. (Wilbur G. Lewellen, S. G. Badrinath, 1997)

#### 3.3.3. Low financial distress costs

According to results based on Titman (1989) companies with high financial distress costs are not the best candidates for LBO. Because of the disappointment and financial problems the workers, suppliers and customers get in case of a bankruptcy, few want to be doing business with a company in or close to financial distress. Results from Titman and Wessels (1988) show negative relationship between firms producing unique products and leverage ratios. With unique products you usually have high development and research costs, which is one of the explanatory variables. With high financial distress costs it will also be harder to get bank loans, a prerequisite for an LBO. (Opler and Titman, 1993)

## 3.3.4. Market position

A lot of time and effort during the due diligence is spent on investigating the market position. The buyer and debt investors prefer a firm with strong market positions. Therefore, they look for qualities such as strong established customer relationships, brand name, economics of scale and better product and service than other companies. If the firm possesses these qualities, not only will the market probably have barriers to entry, but it will increase the chance of continuously generated cash flow. (Easterwood, Seth, and Singer (1989); Rosenbaum and Pearl, 2009)

## 3.3.5. Growth opportunity

If the firm has growth potential, buyers will be even more eager. A growth increases will lead to an increased sale which in turn will lead to an increased cash flow. Thus, interest rates and debt repayments will be easier to pay. The firm value will also increase and therefore enhance the exit opportunities. If the firm has not yet experienced strong market position, a strong growth rate can

generate economics of scale and other benefits related to strong market position. (Rosenbaum and Pearl, 2009)

# 3.3.6. Efficiency opportunities

Financial sponsors (e.g. investment banks) are always looking for efficiency opportunities when analysing the firm through due diligence. They want to find possibilities to improve the operational efficiency as well as lower the costs of the firm. It could be to rationalize the supply chain or change terms for suppliers and/or costumers. It could also be cuts in marketing and capital expenses or begin to outsource non profitable parts. Sponsors should however be careful in cutting to much in areas which can hurt customer retention and growth opportunities. Neither do they want to cut back to much in research and development, which in the long run could lead to a disaster for the company. Therefore the sponsors work and analyse is of great importance in order to choose the right candidate. (Rosenbaum and Pearl, 2009)

# 3.3.7. Low capital expenditures

If a firm has low capital expenditure requirements (capex) and therefore low investment needs, it also improves the ability to increase cash flow. During the due diligence the investors, among other important things, investigate the capital expenditures. They try to differentiate expenses which are necessary for operating business and expenses rather flexible. However, Rosenbaum and Pearl (2009) also argue that a company with high capex requirement shouldn't be excluded. If the firm can show proof of strong growth, high profit margins and a rightful business strategy, it could still be a good LBO candidate.

## 3.3.8. Strong asset base

The debt investors (usually banks) prefer firms with high asset base basically because it will work as a guarantee for their debt repayment in case of a bankruptcy. If its proportion of total asset in tangible property is rather high, perhaps even exceeding the firm's need, a sell- out could be appropriate in order to increase the cash flow. (Miller, 1978)

Having a high asset base may also signal barriers to enter because of the likely need of large investment in order to enter the market e.g. automobile and airline industry. Firms established in such markets are commonly preferred, as mentioned earlier. However, if the firm can show evidence of strong cash flow, it can be considered as a good LBO candidate anyway. (Rosenbaum and Pearl, 2009)

#### 3.3.9. Strong management

A buyer wants to take a closer look at the management team before deciding if the firm is a good candidate of LBO. Either the buyer finds the management profitable and wants to keep them in the company as an asset or it sees the possibility or increasing firm value through changes in the management.

Brilliant management team, whether before or after the LBO, adds value to the firm and is of great importance for the sponsor in order to fulfil his goals. The buyer/sponsor wants the management to be aligned with him and therefore the management is commonly granted equity stake in order to increase the incentives to work hard and reach the sponsors ambitious goals. (Rosenbaum and Pearl, 2009)

#### 3.3.10. Conclusion

An important aspect Miller (1978) presents is that the absence of one or more of these characteristics makes the LBO interesting for investors. If they find it possible to increase cash flow and lower costs through new management or by changes in product or process their willingness of undertake an LBO increase. Therefore, the goal for investors will always be to find either firms with already high cash flow generation or firm with potential of having high cash flow generation.

# 3.4. The LBO model

The core of LBO valuation lies in the LBO model, which aim is to analyze a company's performance under different operating scenarios (e.g. % growth increase) and financial structures (e.g. amount of equity contribution). It is used in both a sell- side advisory context in order to set sale price expectations as well as for the buyer's side to determine a purchase price range and bidding strategy. If the buyer's model doesn't show that the company will meet the required return, the buyer will lay a lower bid. When the purchase price is lower, the return will naturally be higher on the equity contribution. The LBO model is performed by sponsors, bankers and other finance professionals.

How the practical part in an LBO valuation model is made is secrecy in the financial industry. All investment banks have their own way of calculating and do not wish to share their thoughts with others. However, the idea is pretty much the same for all of them, which is why guidance from Rosenbaum and Pearl (2009) will certainly give an appropriate model.

The LBO model is created for the investors by the sponsors in order to see if the company is appropriate and will be able to pay the debt repayments and interest rates. Also the model gives the investors many interesting answers, such as the IRR and cash return on their investment as well as the firm value increase from entry to exit. With help from the linked items in Excel, the sponsors can easily change debt sources, equity contribution, future EBITDA, capex or the exit multiple in order to see how the debt schedule and IRR change because of the change.

In order to build the LBO model you need to complete the following steps;

## 3.4.1. Historical and projected income statement

For the LBO model we need to forecast the company's income statement because we want to know the following years EBITDA, sales growth etc. We need that information to be able to predict how well the company will generate income. Income which will be of great interest in order to pay for the loan you take on. EBITDA is basically important in all calculations during an LBO.

The projected income statement is made through a collection of four years historical results as long as you don't have access to insider information which few have. If for example the company has shown a sales growth between 8%- 10% during the previous four years, an average growth rate of 9% would be appropriate. Often margins and % of sales is pretty similar in the historical results which is why keeping it at those levels seems appropriate if there is no specific guidance. An example of how the EBITDA was calculated;

Historical period				Projection	period						
Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
EBITDA	25900	46300	41900	43800	47340,76	50654,61	54200,43	57994,47	62054,08	66397,86	71045,71
% margin	0,318072	0,375066	0,302925	0,296991	0,3	0,3	0,3	0,3	0,3	0,3	0,3

Table 2: Part of Income Statement

The team who is working with the LBO model can performs different scenario cases such as a base case and a stress case. The stress case is made through cuttings in growth, margins and capex in order to see how well the company is doing in case of a downturn. However, in this thesis a base case is performed where focus lies on analyzing the sensitivity of the returns due to the expected scenario.

The interest expense can however not be filled in until the debt schedule is made.

# 3.4.2. Balance sheet and projected balance sheet items

As in the income statement assumptions need to be done based on historical results. Here the assumptions concern current assets and current liabilities. Adjustment is made to the balance sheet due to the financial structure which we will discuss later. From sources and uses these adjustment will be linked. Also the debt schedule and the cash flow from the projection period will become a part in the balance sheet as we proceed.

## 3.4.3. Cash flow statement through investing activities

The cash flow statement includes cash flow from operating, investing and financial activities. Some of the lines are linked from income statement (net income, amortization of financial fees), some are linked from debt schedule (financial activities) and some are assumptions based on historical results (capital expenditures). The most important role the cash flow statement has got is that it show how much free cash flow the company will generate every year. That cash flow will pay for the debt repayment and is naturally better the bigger the amount.

## 3.4.4. Purchase price assumptions

In order to determine the financial structure of debt and equity a purchase price need to be assumed and calculated. When the equity purchase price is calculated you multiply the price per share with the fully diluted shares outstanding. In order to get the enterprise value you need to add preferred securities and non-controlling interest if the company has got any and then subtract total debt and cash and cash equivalents from the price above. For example; if the share price is \$10 and fully diluted shares outstanding is \$50 million the equity purchase price is \$500 million. If the total debt is \$200 million, preferred securities are \$10 million and cash and cash equivalents are \$5 million, you will end up with an enterprise value of \$305 million (500+10-200-5).

#### 3.4.5. Financing structure

The financial structure is usually referred to as "sources of funds" and "uses of funds". "Sources of funds" is another word for where the capital comes from and" uses of funds" is another word for to what the capital goes to. The sum of sources must equal the sum of uses. How the financial structure is build is different from case to case and depends on what sort of loan you want and are capable of getting. The different types of loans are explained further on in this thesis. The ratio of debt/equity is around 70/30 but the debt is often a combination of different types of debt with different rates. Except the interest rates the company also need to pay financial fees to the sponsors which usually is between 1-2,5 % of the debt depending on what type of debt you have got.

## 3.4.6. Build debt schedule

The debt schedule links necessary information from the cash flow statement such as cash flow from operating and financial activities. Then it is possible to calculate how much cash flow there is left for debt repayment.

Cash flow from operating activities - Cash flow from Investing Activities = Cash Available for Debt Repayment

A schedule can then be created where the mandatory debt first is paid off from the beginning balance of the year. The mandatory debt, amortization, can differ but is normally 1% of the total debt. The remaining cash flow is used for optional debt repayments.

Cash Available for Debt Repayment - Mandatory Repayment= Cash Available for Optional Debt Repayment

The beginning balance of the first year is the total debt, but for every year that passes and repayments are made (both mandatory and optional) the beginning balance reduces until all is paid.

Other schedules for each and every type of loan can then be created based on those results. The point is to see if there is enough cash flow generated from the company to cover the debt repayments.

The interest rates which the interest expenses is based on depends on two things; a rate such as STIBOR (the Stockholm Interbank Offered Rate, a rate at which banks loan between themselves) and secondly the spread on the loan. The spread from the STIBOR rate differ due to what sort of debt you chose but around 3,5 percentage point above is commonly used in case of bank loans also called term loans. Senior subordinated notes works in a different way. Instead of amortization a yearly coupon is paid in form of an interest expense of around 10% of the total loan. The whole sum is paid at maturity in a so called bullet payment.

## 3.4.7. Return analysis

The return analysis is of great importance when the sponsors make decisions. The return analysis provides an answer to whether the investor should expect to get sufficient return on the investment or not. Historically, investors want an IRR (Internal rate of return) above 20% (Rosenbaum and Pearl, 2009). The IRR depends on many different things such as the future financial performance (growth rate, EBITDA, capex etc.), the purchase price, the size of equity contribution, the exit year and exit multiple. They are all predictions and assumptions which is why you can't completely rely on the calculated IRR. However, it is always true that the higher IRR you have, the better investment. The IRR is based on the net present value (NPV) equation. The original equation is:

$$NPV = \sum_{n=0}^{N} \left( \frac{c_n}{(1+r)^n} \right)$$

Formula 1a

C stands for cash flow at time n and NPV is the present value of all future cash flow. The initial investment is  $C_0$  and NPV is the equity value at time N.

In this case, when the initial investment (equity contribution) and equity value at exit n=5 is known, it is possible to calculate IRR with following formula:

 $(NPV/C0)^{1/5} = r$ 

Formula 1b

Notice that different exit years have different equity values, which is why it is very important to compare IRR at different exit years.

The following equation is used to explain how the enterprise value at exit is calculated.

Exit EBITDA multiple \* EBITDA at Exit = Enterprise Value at Exit

Formula 2

Historically, the exit multiples change over the years and due to transaction size which imply that different exit multiples should be taken into consideration when creating the LBO model. The EBITDA at exit is calculated through an assumed expected increase each year.

The cash return is perhaps the most important line. It is a ratio of:

Equity value at exit ÷ Initial equity investment

Formula 3

How high cash return a sponsor wants differ quit a lot but 2x- 3x is reasonable result (Rosenbaum and Pearl). The cash return is often considered as more reliable in comparison to IRR. As an investment banker said in an interview made by Carl- Johan Strandberg (2010) "you can't eat IRR", meaning that being able to double your invested money is often more important than showing high IRR.

While cash return is easily calculated, IRR is a sensitive variable. It is therefore crucial that all the assumptions are made as reliable as possible and also to make an IRR sensitivity analysis in order to give a clear picture of the expected return. Two different analyses can be interesting to perform; First an analysis with fixed exit multiple where cash return and IRR change due to different exit years, thereafter an analysis where both the exit multiple and exit year change during the seven years period. Naturally, if the equity contribution decreases, the IRR and cash return will increase keeping the exit value fixed.

## 3.4.8. Linked lines

Many different parts in the LBO model need to be linked to each other. To give a few examples the net income calculated in the income statement need to be linked to the cash flow statement under operating activities. "Cash flow from operating activities" and "cash flow from financial activities" in the cash flow statement need to be linked to the debt schedule. The debt schedule needs to link the calculated interest expenses to the income statement. When all is correctly done it is possible to change growth rate or financial structure at one place and in a second receive information on how it affects debt schedule, cash return, IRR and so on.

# 3.5. Financing the LBO

How the leveraged buyout is financed depends on the due diligence and in what economical state the company is as well as different investors' choice. The financial structure may vary a lot and includes different kinds of loan, securities and other debt instrument. The most common ones are;

- Bank debt
- High yield bonds
- Mezzanine debt
- Equity contribution

While equity contribution simply is the amount of equity you contribute with when buying the company, the other part of the structure is more complex and can be constructed in many different ways.

#### **3.5.1.** Bank debt

Bank debt has got the highest ranking and lowest cost of capital (interest rate). On the other hand is has got a low flexibility because the borrower has to maintain a designated credit profile and keep certain financial ratios in order to get the loan. Bank debt, also referred to as senior secured credit debt, is an important part of the financial structure and will stand for the largest part of the sources of funds. There are different types of loan inside the bank debt such as revolver credit facility and term loan facilities. They are not very different from each other. The revolver has the ability to freely repay and re-borrow during the time of the facility as long as it is in line with the conditions in the credit agreement. Similar to the term loan, the revolver has amortizations and interest rate payments. Both of them require the borrower to maintain a certain credit profile in order to keep the loan. Even though a revolver may be used to fund a part of the purchase price, it is not used in this thesis.

A term loan has a specified maturity and will during the period pay amortizations according to a schedule. On the date of maturity, a term loan is fully funded. It can be classified as either A, B, C or any other letter which will be in accordance with the amortization schedule and terms. "A" term loan typically requires very high repayment throughout the life of the loan and will therefore have a short life. "B" term loan is more commonly used in LBO financings (Rosenbaum and Pearl, 2009). The loan is often larger in size than "A", has a smaller amortization but a longer life. Historically, term loan B with a maturity of seven years has been the market standard for leveraged buyouts, which is why I will be using term loan b in this thesis.

Because banks often have high requirements in order to give a loan, not the entire amount of the loan needed for an LBO can be provided from a bank.

## 3.5.2. High yield bonds

High yield bonds have no amortization. Instead there is one big payment at maturity, often seven to ten years after the issuance. However, interest payments are paid during the entire period with fixed and much higher interest rate than bank debt. The higher interest rate, also referred to as coupon payment, is accurate in order to compensate the investor for the higher risk that follows with high yield bonds. Less restricted covenants, longer maturities and lack of mandatory repayments makes the high yield bonds both a more flexible and riskier alternative to bank debt. Perhaps, the most important advantage is the possibility to either reduce equity investment or be able to buy a company which before was too expensive.

## 3.5.3. Mezzanine debt

The mezzanine debt is the opposite to bank debt with low ranking and high interest rate but has instead high flexibility. It is a non- convention funding which includes equity- based options and lower priority debt (subordinated). Mezzanine debt is undertaken by investors who are not accepted

to a bank loan due to lower requirements. Therefore, mezzanine debt has higher interest rates. On the other hand it has a big flexibility regarding the construction of the loan and how the repayments are made, which is why it is a highly negotiated instrument. Mezzanine debt is however not used in this thesis.

# 4. Empirical results

The empirical study on Unibet Group Plc has been made through creating and analyzing the LBO model along with searching for the characteristics of a well suited company. The future and potential in online gambling is also investigated.

# 4.1. Unibet Group Plc

The company, incorporated in Malta, is one of Europe's largest online gaming operators with over 5,3 million registered customers in more than 150 countries and with a gross winnings revenue close to 150 million GBP(2010).

Via websites, mobile phones and other mobile devices customers can bet and play games. The available products are sports betting, live betting, casino, poker, lotteries, bingo and soft games.

Unibet Group plc was founded 1997 and has been listed on the Nasdaq OMX Nordic Exchange in Stockholm since 2004. (Unibet Group plc Annual Report and Accounts 2008)

The Company's subsidiaries include Global Leisure Partners Limited, Unibet (Holding) Limited, Unibet (International) Limited, Maria Holdings Limited and Maria Services Limited.

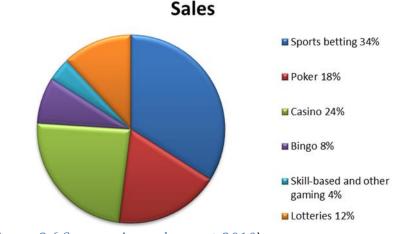


Figure 2 (Source: Annual report 2010)

Unibet wants to enter more markets within Europe who has got strong gambling culture and develop sport betting within the domestic sports. They also want to develop new gambling products for existing as well as new customers in order to reduce the dependence on sport betting. Naturally, they also search for the newest distribution channels, e.g. mobile application, in order to simplify the gambling, attract new customers and thereby increase the use of the gambling services.

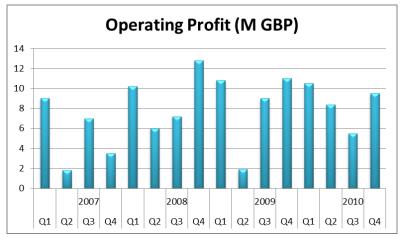


Figure 3 (Source: Annual reports from 2007-2010)

There are big changes in the operating profit during the year, mostly explained by different sports event such as the Football European Championship etc. which increase the amount of money being rotated. However, it seems to be more stabilized during the last year. One explanatory variable is the introduction of new games and casino in order to reduce the sport betting impact.

The amount of people, playing games and betting on sports, has increased continuously over the years which lead to bigger revenues. The increase in revenue during 2010 is mostly explained by OG in Vancouver as well as the Football WC in South Africa. In the figure below, revenues from five years back has been collected and inserted in a chart.

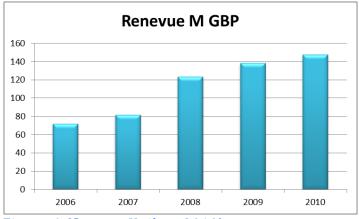


Figure 4 (Source: Unibet, 2010)

# 4.2. Market analysis for Online Gambling

The following chart shows the expected development and growth of the European online gaming. Since Unibet is one of the largest companies on the market with a strong position, capacity and willingness to expand even more, they should most certain be a part of this development.

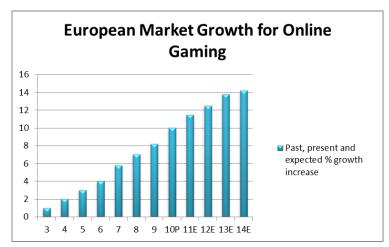


Figure 5 (Source: H2 Gambling Capital, January 2011 on behalf of Unibet)

The Financial Times shows the Dow Jones Gambling Index which tells us that the gambling industry seems to be sensitive to the market since the financial crisis made the index take a down turn. Its significance is however not tested. The last years' upward turns give expectations to believe in a positive future for the gambling industry with continuous growth.

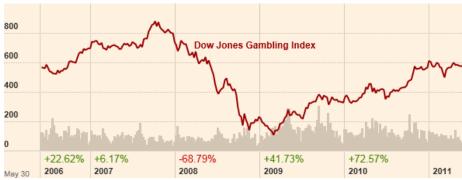


Figure 6 (Source: Financial Times, 2011)

## 4.3. LBO- Characteristics in Unibet

With evidence from the LBO analysis further on in this thesis we can see that Unibet's cash flow is high enough to be considering a leveraged buyout. It will be possible for Unibet to pay the debt repayment and interest rates during the seven years to follow, if the assumptions are correctly made. It also has low financial distress costs due to the absence of large fabrics, suppliers in need or specialized products.

As one of the leading gambling companies in Europe, Unibet has got a good market position. With ten years of experience in the business and approximately five million users they have certainly created a very well functioned site and forum for players. It is however not huge barriers to entry. There is always a chance that another similar company with an even better approach enters the market and steal Unibet's customers. Since there are already many gambling companies in the market today and they all can survive and grow, Unibet's position will grow stronger as they plan to expand into new markets and continuously develop. Unibet shows proof of growth opportunities based on historical results as well as from opinions from financial analytics. The Financial Times

analysts believe in a long term increased growth in Unibet's revenue. For year 2012 they believe in a positive growth of 5,43%. However, I have also taken into consideration that last year's sales growth increase of 6,6% was the lowest increase over the last four years, which is why an increase of 7% has been used as a general average increase during the seven years to come. Perhaps an even higher average growth rate could be used, but don't want to be too optimistic.

Unibet's customers' low average age reflects that the company is positioned in a young business (Annual report 2010). 45% of the customers are below 30 years old and 89% are below 40 years old. Since you can expect or at least guess that the people already gambling will continue as they grow older, there are expectations of a positive future.

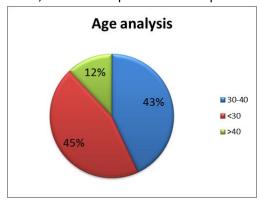


Figure 7 (Annual report 2010)

With capital expenditures between 0,6% and 1,5% of sales during the past four years, the capex requirements are rather low. The capital investments needed are low, hence the cash flow has ability to grow (Rosenbaum and Pearl, 2009).

During the past years you can also see a strong asset base in Unibet and a low debt ratio, yet another sign of being a good candidate for LBO.

# 4.4. The LBO Model

The LBO model could simply be said to be a creation of a projection period of the target company and a debt schedule based upon the type of loan you undertake. The historical performance as well as assumptions about future performance is of great importance in order to know the company's future cash flow. The free cash flow must be able to cover the amortizations and interest expenses. Otherwise the company need to change the financial structure, e.g. increase equity contribution, or the company is not appropriate for a leveraged buyout.

The following pages will show step by step how the LBO valuation is created. Calculations within the income statement, the balance sheet and the cash flow statement along with calculations of purchase price and debt schedule will be presented. The most important part for the investor is to look at the IRR and cash return which, if properly calculated, should give a good indication of the return on the investment. Naturally, the return on the equity contribution, the investment, plays a big part in the decision- making process whether to undertake an LBO or not.

As the conclusion explains on page 28 and 29 small changes in the variables can drastically change IRR and therefore also a decision from perhaps not recommend an LBO to highly recommend it.

Notice that all amounts are in thousands GBP.

#### 4.4.1 Income Statement

The projection period is calculated through the historical results shown on the left hand side of the line and assumptions of future performance, highlighted in grey. Sales growth increase has decreased over the years from 51,6% 2008 to 6,6% 2010. An average sales growth increase of 7% was therefore assumed for the projection period. Other assumptions are "EBITDA margin" of 30%, "SG&A sales" of 64% and "depreciation and amortization % of sales" of 6,5%. All are based on previous years' performance. A tax rate of 35% is used due to Malta's restrictions (worldwide-tax). Administration agent fee is assumed to be 1%.

In order to know the cash interest expenses the debt schedule need to be made. I link the interest expenses on the loan from the debt schedule to the income statement. It is now possible to calculate the net income. The net income is thereafter linked to the cash flow statement under operating activities. A net income % margin can be calculated and gives us a hint of how the net income is expected to change over the following years. The margin increases as the loan repayments decrease and EBITDA increases.

Income Statement											
	Historical P	eriod				Projection	Period				
					Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	2007	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017
Sales	81428	123445	138318	147479	157802,5	168848,7	180668,1	193314,9	206846,9	221326,2	236819,0
% growth	13,4%	51,6%	12,0%	6,6%	7%	7%	7%	7%	7%	7%	7%
Cost of Goods	5278	11040	17641	18486	19725,3	21106,1	22583,5	24164,4	25855,9	27665,8	29602,4
Gross Profit	76150	112405	120677	128993	138077,2	147742,6	158084,6	169150,5	180991,1	193660,4	207216,7
% margin	94%	91%	87%	87%	88%	88%	88%	88%	88%	88%	88%
Selling, General & Adm	51917	75904	87926	94776	100993,6	108063,2	115627,6	123721,5	132382	141648,8	151564,2
% sales	64%	61%	64%	64%	64%	64%	64%	64%	64%	64%	64%
EBITDA	25900	46300	41900	43800	47340,8	50654,6	54200,4	57994,5	62054,1	66397,9	71045,7
% margin	31,8%	37,5%	30,3%	29,7%	30%	30%	30%	30%	30%	30%	30%
Depreciation and Amo	4506	9786	9141	9547	10257,2	10975,2	11743,4	12565,5	13445,1	14386,2	15393,2
EBIT	21394	36514	32759	34253	37083,6	39679,4	42457,0	45429,0	48609,0	52011,7	55652,5
%margin	26%	30%	24%	23%	24%	24%	24%	24%	24%	24%	24%
Interest Expense											
Term B loan					10937,95	9564,445	7983,214	6174,901	4118,587	1791,673	278,8159
Senior Sub Notes					8101,55	8101,55	8101,55	8101,55	8101,55	8101,55	8101,55
Administration Agent F	ee				190,395	176,66	160,8477	142,7645	122,2014	98,93225	83,80368
Cash Interest Expenses	:				19229,9	17842,66	16245,61	14419,22	12342,34	9992,158	8464,172
Earnings before Taxes					17853,7	21836,8	26211,4	31009,8	36266,7	42019,5	47188,3
Income Tax Expense					6248,794	7642,876	9173,988	10853,42	12693,34	14706,83	16515,91
Net Income					11604,9	14193,91	17037,41	20156,36	23573,35	27312,68	30672,4
%margin					7,4%	8,4%	9,4%	10,4%	11,4%	12,3%	13,0%
Income Statement Ass	umtions										
Sales% growth	13,4%	51,6%	12,0%	6,6%	7,0%	7,0%	7,0%	7,0%	7,0%	7,0%	7,0%
COGS % margin	6,5%	8,9%	12,8%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%	12,5%
SG&A % sales	64%	61%	64%	64%	64%	64%	64%	64%	64%	64%	64%
Depreciation& Amortiz	5,5%	7,9%	6,6%	6,5%	6,5%	6,5%	6,5%	6,5%	6,5%	6,5%	6,5%
Tax Rate					35%	35%	35%	35%	35%	35%	35%
Administration agent F	ee % of inte	erest rates			1%	1%	1%	1%	1%	1%	1%

Table 3: Income statement

#### 4.4.2. Cash Flow Statement

The projection period is based on links from the debt schedule and the income statement. The capital expenditures (capex) assumption based on historical results is highlighted in grey. "Cash flow from financial activities" is the most important line which shows how much free cash flow Unibet has available for debt repayments from year to year. It gives a clear view of how the cash flow increases as the company grows stronger and stronger.

	Projection	Period					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	2011	2012	2013	2014	2015	2016	2017
Operating Activities							
Net Income	11604,9	14193,91	17037,41	20156,36	23573,35	27312,68	30672,4
Plus: Depreciation and Amortization	10257,16	10975,17	11743,43	12565,47	13445,05	14386,2	15393,24
Plus: Amortization of financial fees	1031,2	1031,2	1031,2	1031,2	1031,2	1031,2	1031,2
Changes in Working Capital	1563,3	1657,1	1756,5	1861,9	1973,6	2092,0	2217,5
Cashflow from Operatin Activities	21330,0	24543,2	28055,5	31891,1	36076,0	40638,0	44879,3
Investing activities							
Capital Expenditures	1262,4	1350,8	1445,3	1546,5	1654,8	1770,6	1894,6
Cash Flow from Investing Activities	1262,4	1350,8	1445,3	1546,5	1654,8	1770,6	1894,6
Financing Activities							
Term Ioan B	20067,5	23192,4	26610,2	30344,6	34421,2	38867,4	42984,7
Cash Flow from Financial Activities	20067,5	23192,4	26610,2	30344,6	34421,2	38867,4	42984,7
Cah Flow Statement Assumtions							
Capital Expenditures % of sales	0,80%	0,80%	0,80%	0,80%	0,80%	0,80%	0,80%

Table 4: Cash flow statement

To better see the free cash flow growth during the LBO, free cash flow is divided by sales for each and every year. Due to the increased sales and EBITDA and the reduced interest expenses for every year it can appear as an obvious observation but still worth mentioning.

Year	2011	2012	2013	2014	2015	2016	2017
Free cash flow % of sale	12,7%	13,7%	14,7%	15,7%	16,6%	17,6%	18,2%

Table 5: Free cash flow % of sales

#### 4.4.3. Purchase Price

With a share price of £13,66 (Avanza bank) and with fully diluted shares outstanding of a bit over £28 million (annual report 2010) the equity purchase price and enterprise value is calculated. The amount of £6885 and £38495 is the remaining debt and cash Unibet has got before the buyout. It is also possible to add a premium of approximately 20% per share if the owners want a higher price in order to sell. However, I take the approach as if no premium is necessary.

How the buyer decide to pay in form of debt and own equity contribution is thoroughly described further down.

Purchase Price	
Price per share (GBP)	13,6561
Fully Diluted Shares Outstanding	28268,7710
<b>Equity Purchase Price</b>	386040,2976
Less: Debt	6885
Plus: Preferred Securities	-
Plus: Non- controlling Interest	-
Less: Cash and Cash Equivalents	38495
Enterprise Value	340660,2976

Table 6: Purchase price

#### 4.4.4. The Financial Structure

When knowing the purchase price of Unibet's Equity it is possible to calculate the uses of funds, meaning the total amount the buyer must be prepared to pay. The "uses of funds" includes; purchase price, existing debt before the buyout, financial fees and other fees and expenses related to the buyout. We can see in the table below that 95% of the total amount is spent on the purchase price. Existing debt is taken from the annual report of 2010 and fees of 2% respective 1% are considered as standard. The total amount of capital needed is £405,0776 million

The capital you need when undertaking a leveraged buyout of Unibet, in this case £405,0776 million, must come from somewhere. A financial structure is constructed in order to fulfil that task.

Financial decisions need to be made based on how much equity contribution and debt you would like and have capability of having. The total amount of sources must equal the total amount of uses. The financial structure of sources has been made as general as possible for today's LBO.

45% (= £182,2849 million) is financed with a type of bank loan (senior secured debt) such as term loan B. A senior secured debt differs from a senior subordinated debt in the sense that it has higher priority. In case of a bankruptcy the lender of a senior secured debt will be the first one to receive repayment.

20% (= £81,0155 million) is financed with high yield bonds.

35% (= £141,7772 million) is financed with equity contribution also called initial investment. This is the investment the buyer makes and it is on this capital she hopefully will receive a high return. Calculations on IRR and cash return which will be shown further on, are all based on this amount of equity contribution.

Sources of Funds				Uses of Funds			
		% of Total	Multiple of EBITE	AC			% of Total
	<u>Amount</u>	<u>Sources</u>	<u>2010</u>			<u>Amount</u>	<u>Uses</u>
Senior Secured Dept	182284,9	45%	4,2		Purchase Unibet Equity	386040,3	95%
Senior Subordinated Dept	81015,5	20%	1,8		Repay Existing Dept	6885	2%
Equity Contribution	141777,2	35%	3,2		Financing Fees	8101,6	2%
					Other Fees and Expenses	4050,8	1%
Total Sources	405 077,6	100%	9,2		Total Uses	405077,6	100%

Table 7: Financial structure

#### 4.4.5. Debt schedule

The seven year swap rate is used as a base rate of 2,85% (SEB, 2011). The spread of the term loan B is 3,5% (Rosenbaum and Pearl, 2009) which lead to an interest rate of 6,35% during the projected period.

The first part: Cash available for debt repayment is the line linked from the cash flow statement also mentioned before. Now we can see how much is left of that cash flow when the mandatory repayment (1% of the whole loan every year) is subtracted. That amount is seen on the line cash available for optional debt repayments.

Second part: Term loan B with term of 7 years, amortization of 1% every year and as mentioned above a spread of 3,5%. The cash available for optional debt repayment is exactly enough to repay all the debt. Even though 3,4 thousands GBP is not 0, it is not enough to be considered as below 100% with 2 decimals specificity.

Third part: The high yield bond, senior subordinated notes, has a term of 7 years and a coupon of 10% which is common for such debt (Rosenbaum and Pearl, 2009). The repayment of the complete loan is not seen on the schedule but will burden the next year.

Fourth part: Here is the interest expenses with a 6,5% of the remaining term loan B every year and the annual 10% interest rate from the senior subordinated notes as well as the amortization administration agent fees of 500. This all added together end up with cash interest expense which in turn is linked to the income statement and will be subtracted from the EBIT among other things in order to become the net income.

Debt Schedule							
	Projection Period	1					
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
	2011	2012	2013	2014	2015	2016	2017
Swap rate (7 year)	2,85%	2,85%	2,85%	2,85%	2,85%	2,85%	2,85%
Cashflow from operating activities	21330,0	24543,2	28055,5	31891,1	36076,0	40638,0	44879,3
Cashflow from Investing Activities	1262,4	1350,8	1445,3	1546,5	1654,8	1770,6	1894,6
Cash Available for Debt Repayment	20067,5	23192,4	26610,2	30344,6	34421,2	38867,4	42984,7
Mandatory Repayment	1822,8	1822,8	1822,8	1822,8	1822,8	1822,8	1822,8
Cash Available for Optional Debt Re	18244,7	21369,5	24787,3	28521,7	32598,3	37044,6	41161,9
Term B loan (bank loan)							
Debt	182284,93	Repayment Schedul	1% per annum				
Spread	3,5%						
Term	7 years						
Year	1	2	3	4	5	6	7
Beginning Balance	182284,93	162217,4	139025,0	112414,8	82070,2	47649,0	8781,6
Repayments	1822,8	1822,8	1822,8	1822,8	1822,8	1822,8	1822,8
Optional Repayment	18244,7	21369,5	24787,3	28521,7	32598,3	37044,6	6958,8
Ending Balance	162217,4	139025,0	112414,8	82070,2	47649,0	8781,6	0,0
Interest Rate	6,35%	6,35%	6,35%	6,35%	6,35%	6,35%	6,35%
Interest Expenses	10937,9	9564,4	7983,2	6174,9	4118,6	1791,7	278,8
Senior Subordinated Notes							
Size	81015,53						
Term	7 years						
Coupon	10%						
Year	1	2	3	4	5	6	7
Beginning Balance	81015,53	81015,53	81015,53	81015,53	81015,53	81015,53	81015,53
Repayment	-	-	-	-	-	-	-
Interest expense	8101,55	8101,55	8101,55	8101,55	8101,55	8101,55	8101,55
Interest expenses							
Term B loan	10937,9	9564,4	7983,2	6174,9	4118,6	1791,7	278,8
Senior Sub Notes	8101,6	8101,6	8101,6	8101,6	8101,6	8101,6	8101,6
Administration Agent Fee	190,4	176,7	160,8	142,8	122,2	98,9	83,8
Cash Interest Expenses	19229,9	17842,7	16245,6	14419,2	12342,3	9992,2	8464,2

Table 8: Debt schedule

# 4.4.6. Return Analysis- Financial structure 1

A return analysis is made with the assumption of an exit in 5 years. The exit multiple is assumed to be 9. It is based on the table below which shows different multiples used in the US market between 2007 and 2009. They are divided into groups according to size of the transaction, meaning the purchase price.

US Middle Ma	US Middle Market EBITDA valuation Multiples by size of transaction											
	2007	2008	2009									
<\$50 M	10,2	5,3	7,5	7,8	6	5,3						
\$50- \$250 M	11,1	6,7	8,6	9,3	10,6	7,7						
\$250- \$750 M	11,2	7,2	9,1	9,3	10,1	8,1						

Table 9 (Source: Corporate Finance Network, 2011)

Unibet purchase price of £ 386 M is approximately \$623 M.

From the income statement we get the assumed EBITDA at 2015. Multiplied with the exit EBITDA multiple (9) we get the enterprise value of £558486,7 thousands in 2015.

After subtracting the total debt from the enterprise value at exit we end up with an equity value at exit that we can use our IRR and cash return calculation.

Calculation o	f Exit Enterpr	ise Value and	<b>Equity Value</b>
			Year 5 (2015)
2015E EBITDA			62054,1
Exit EBITDA N	Multiple		9
<b>Enterprise Va</b>	lue at Exit		558486,7
Less:			
term Loan B			47649,0
Senior Subor	dinated Note	S	81015,52528
Total Dept			128664,6
<b>Equity Value</b>	at Exit		429822,1

Table 10: Equity- and Enterprise value at exit

With an initial investment of £141777,2 thousands and an equity value at exit of £429822,1 thousands we will have an internal rate of return of 24,8%. The cash return on the investment is 3,03 (Equity value at exit ÷ Initial equity investment). The IRR equation and more information about key drivers are found in 3.4.7.

IRR and Cash	Return
	Year 5 (2015)
Initial Equity	-141777,2
<b>Equity Value</b>	429822,1
IRR	24,8%
Cash Return	3,03

Table 11: IRR and Cash return

# 4.4.7. Sensitivity Analysis

With an entry multiple of 7,8 and exit multiple fixed at 9, we can see in the table below how the cash return and IRR change due to different exit years. The EBITDA and Enterprise value increase as the debt level decrease due to repayment done during the years. Therefore the cash return continuously increase with exit year. IRR changes due to many different reasons and can therefore vary up and down during different exit years.

IRR		29,0%	28,9%	27,5%	26,1%	24,8%	23,7%	21,6%
								558395,
							507783,6	
						429822,1		
				,	358864,4			
			,	294373,6				
. ,		,	235851,0					
Equity Proceeds		182833,9	,		,	,	,	
Initial Equity Investment		-141777,2	-141777,2	-141777,2	-141777,2	-141777,2	-141777,2	-141777,2
	2010-12-30	2011-12-30	2012-12-30	2013-12-31	2014-12-30	2015-12-30	2016-12-30	2017-12-30
Cash Return		1,29	1,66	2,08	2,53	3,03	3,58	3,94
Equity Value at Exit		182833,9	235851,0	294373,6	358864,4	429822,1	507783,6	558395,9
Total Dept		243232,9	220040,5	193430,4	163085,8	128664,6	89797,1	81015,
Senior Subordinated Notes	;	81015,5	81015,5	81015,5	81015,5	81015,5	81015,5	81015,
Term Loan B		162217,4	139025,0	112414,8	82070,2	47649,0	8781,6	0,0
Less:								
Enterprise Value at Exit		426066,83	455891,51	487803,91	521950,19	558486,70	597580,77	639411,43
Exit EITDA Multiple	9							
EBITDA		47340,8	50654,6	54200,4	57994,5	62054,1	66397,9	71045,
Initial Equity Investment	141777,2							
Entry EBITDA Multiple	7,8							
		2011	2012	2013	2014	2015	2016	201
Return at Various Exit Years	S			Projection Period	d			

Table 12: Return analysis structure 1

Since IRR can change quite much depending on what exit year and exit multiple we chose, it is of great interest to create this table of different variables. In bold text we find the IRR for our chosen LBO model if we exit after five years.

IRR Sensitivity Analysis-	Exit Multiple	and Exit Year				
		IRR- Assumir	ng 7,8x Entry	Multiple		
				Exit Year		
		2013	2014	2015	2016	2017
	7,0	11,2%	15,4%	17,3%	18,0%	17,0%
Exit Multiple	8,0	20,6%	21,6%	21,6%	21,2%	19,6%
	9,0	27,5%	26,1%	24,8%	23,7%	21,6%
	10,0	36,0%	31,6%	28,7%	26,5%	24,0%
	11,0	42,6%	35,9%	31,7%	28,8%	25,8%

Table 13: IRR sensitivity analysis structure 1

# 4.4.8. Return analysis- Financial structure 2

A second IRR sensitivity analysis is presented in order to give a clear picture of the possible changes in returns due to different financial structures. Following changes are made:

- Equity contribution is reduced from 35% to 25 %
- Total debt increases from 65% to 75 % (50% term loan B and 25% senior subordinated notes)

After new calculations based on the new financial structure both cash returns and IRR increase. If we keep the exit multiple of 9 and exit in five years as in the previous example, the IRR increase from 24,8% to 28,3% and the cash return increase from 3,03x to 3,48x. Even though the company's cash flow has to cover a higher amount of debt repayments and interest rates, the lower initial equity contribution will give a relative higher return.

Return Analysis								
Return at Various Exit Years				Projection Pe	riod			
		2011	2012	2013	2014	2015	2016	201
Entry EBITDA Multiple	7,8							
Initial Equity Investment	101269,407							
EBITDA		47340,8	50654,6	54200,4	57994,5	62054,1	66397,9	71045,7
Exit EITDA Multiple	9							
Enterprise Value at Exit		426066,831	455891,509	487803,9148	521950,189	558486,702	597580,7712	639411,4252
Less:								
Term Loan B		188619,9	172112,8	152766,9	130310,6	104450,5	74869,0	41223,2
Senior Subordinated Notes		101269,4	101269,4	101269,4	101269,4	101269,4	101269,4	101269,4
Total Dept		289889,3	273382,2	254036,3	231580,0	205719,9	176138,4	142492,6
Equity Value at Exit		136177,6	182509,3	233767,6	290370,1	352766,8	421442,3	496918,8
Cash Return		1,34	1,80	2,31	2,87	3,48	4,16	4,91
	2010-12-30	2011-12-30	2012-12-30	2013-12-31	2014-12-30	2015-12-30	2016-12-30	2017-12-30
Initial Equity Investment		-101269,4	-101269,407	-101269,407	-101269,407	-101269,407	-101269,4066	-101269,4066
Equity Proceeds		136177,6						
			182509,3					
				233767,6				
					290370,1			
						352766,8		
							421442,3	
								496918,8
IRR		34,5%	34,2%	32,1%	30,1%	28,3%	26,8%	25,5%

Table 14: Return analysis structure 2

It is interesting to see that the cash return increases each year and is in 2017 as high as 4,91x and the IRR 25,5%.

There is an increase in IRR when the exit multiple increase to 10 or 11 which could lead to an IRR of 36,3% in 2015, indicating a really good return on the investment.

IRR Sensitivity Analysis-	Exit Multiple	e and Exit Yea	nr			
		IRR- Assumir	g 7,8x Entry N	Multiple		
				Exit Year		
		2013	2014	2015	2016	2017
	7,0	7,4%	14,5%	17,7%	19,1%	21,5%
Exit Multiple	8,0	21,0%	23,1%	23,5%	23,2%	24,4%
	9,0	32,1%	30,1%	28,3%	26,8%	25,5%
	10,0	41,6%	36,2%	32,6%	29,9%	29,2%
	11,0	49,9%	41,5%	36,3%	32,7%	31,2%

Table 15: IRR sensitivity analysis structure 2

# 4.4.9. The complete LBO model

All different parts in the LBO model have now been presented. They come together and create the following table; the complete LBO model. It contains the summary of the previous calculated results and will give sponsors and investors a good overview of the target company's (Unibet Group plc.) potential. Most interesting are purchase price, return analysis and certainly capitalization, where you may follow the % bank debt repaid for each and every year. In 2017, 100% is repaid.

Uniber Group Fic.	<u>D</u>											
(£ in thousands)												
Transaction Summary												
Sources of Funds				Use	Uses of Funds			Purchase Price			Return Analysis	
	%	% of Total N	Multiple of EBITDA				% of Total	Equity Purchase Price	386040,3		Exit Year	2017
	Amount S	Sources	<u>2010</u>			Amount		Plus: Existing Net Dept	6 885,0		Entry Multiple	7,8x
Senior Secured Dept	182284,9	45%	4,2	Pur	Purchase Unibet Equity	386040,3	95%	95% Enterprise Value	340 660,3		Exit Multiple	9x
Senior Subordinated Dept	81015,5	20%	1,8	Rep	Repay Existing Dept	6885	1,7% T	Transaction Multiples			IRR	24,8%
Equity Contribution	141777,2	35%	3,2	Fin	Financing Fees	8101,6	2%	2% Enterprice Value/Sales		2,3	2,3 Cash Return	3,03
				Oth	Other Fees and Expens		1,0%	2010	147479			
Total Sources	405 077,6	100%	9,2	Tot	Total Uses	4(	100%					
								Enterprise Value / EBITDA	OA	7,8		
								2010	43800			
Summary Financial Data												
	I	Historical period	ď	,		Projection Period	riod					
						Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
		2007	2008	2009	<u>2010</u>		<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	2017
Sales		81428	123445	138318,0	147479,0	157802,5	168848,7	180668,1	193314,9	206846,9	221326,2	236819,0
% growth		13,4%	51,6%	12,0%	6,6%	7%	7%	7%	7%	7%	7%	7%
Gross Profit		76150	112405	120677	128993	138077,2	147742,6	158084,6	169150,5	180991,1	193660,4	207216,7
% margin		93,5%	91,1%	87,2%	87,5%		87,5%	87,5%	87,5%	87,5%	87,5%	87,5%
EBITDA		25900	46300	41900	43800	47340,8	50654,6	54200,4	57994,5	62054,1	66397,9	71045,7
% margin		31,8%	37,5%	30,3%	29,7%	30%	30%	30%	30%	30%	30%	30%
Capital Expences		6604	1957	837	1303	1262,4	1350,8	1445,3	1546,5	1654,8	1770,6	1894,6
% sales		8,1%	1,6%	0,6%	0,9%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%	0,8%
Cash interest Expense						19229,9	17842,7	16245,6	14419,2	12342,3	9992,2	8464,2
Eroo Cach Elow												
EBITOA						8 UV24V	בטפבע פ	E 0000 V	5700 <i>1</i> 5	6205/1	66307 0	710/15 7
Less: cash interest expense						19229.9	17842.7	16245.6	14419.2	12342.3	9992.2	8464.2
Plus: Interest Income						,	' .		١ ,	,	'	
Less: Income Taxes						3683,6	4963,6		7642,5	9046,3	10496,5	11995, 75744
Less: Capital Expenditures						1262,4	1350,8		1546,5	1654,8		1894,6
Less: Increse in Net Working Capital	Capital	8673	6945	2404	-1408	1578,0	1688,5	1806,7	1933,1	2068,5	2213,3	2368,2
Free Cash Flow						21586,8	24809,1	28420,4	32453,0	36942,1	41925,3	46323,0
Cumulative Free Cash Flow						21586,8	46395,9	74816,3	107269,3	144211,5	186136,8	232459,9
Capitalization												
Cash												
Term Loan B					182284,9	162217,4	139025,0	112414,8	82070,2	47649,0	8781,6	0,0
Senior Subordinated notes					81015,5	81015,5	81015,5	81015,5	81015,5	81015,5	81015,5	81015,5
Total Dept					263300	243233	220041		163086	128665	89797	81016
Shareholders Equity					129624,8	141229,7	155423,7	172461,1	192617,4	216190,8	243503,4	274175,8
Total Capitalization					392925,3	384462,7	375464,2	365891,4	355703,2	344855,3	333300,6	355191,4
0/ -6						11 0%	22 7%	700 00/	EE 0%	73 0%	25 7%	100 0%

# 5. Analyze of Results

## **5.1.** Characteristics in Unibet

Unibet show evidence of possessing almost all the characteristics needed for a leveraged buyout as it seems from the empirical results.

With the sales and EBITDA growth rate assumed, it will generate enough free cash flow to cover the debt repayments and interest expenses. The financial distress cost is assumed to be low, but unknown costs can appear which is hard to foresee. Unibet has not got the leading market position, but still one of the biggest online gambling companies in Europe. As Unibet continuously keep on expanding and entering into new markets their market position grow stronger and stronger. The result of that is seen in Unibet's revenue which continuously grows. The low capital expenditures requirement used in the model is considered low and assumes to be realistic due to the historically levels of an average of 0,8% of sales. The asset base is pretty strong compared to liabilities but can still not be compared with other industries such as the car industry which usually has got a much stronger asset base.

Some of these characteristics are hard for an outsider to know. If there are efficiency opportunities, if the management is capable enough or if Unibet has got a low Tobin's q is unfortunately impossible for me to know at the moment. The only conclusion which is possible to draw is that one can always find ways to rationalize a company and improve the management.

# 5.2. LBO analysis

When analyzing an LBO model, it is usually enough to look at the transaction summary. It contains all lines of importance such as projected performance, debt payments, equity contribution, debt levels and not to forget the IRR and cash return of the investment.

#### **5.2.1.** Financial structure

The financial structure used throughout the thesis (except the last return analysis part) contains an equity contribution of 35%, term loan B of 45% and senior subordinated notes of 20%. How the structure is combined depends not only on the buyer's wish but on how the company and buyer is evaluated by the sponsor due to credit ability. If the bank doesn't want to provide 45%, other high yield bonds or even mezzanine debt need to be considered. That means higher rate and higher interest expenses. However the amortization will in that case decrease. Therefore it might not be this structure. The effect of another structure is shown in the return analysis. There it is shown how an increase of leverage actually increases the return.

## 5.2.2. Debt Schedule

The debt schedule is based partly on the financial structure, purchase price and base rate, and partly on different loan conditions. It is therefore hard to predict how the debt schedule will look like. In the US market during the end of 1980<sup>s</sup> this was the weak point. It is still hard to know if the cash flow will be able to cover the debt because its ability to shift up and down, which is why the debt level has decreased since then. The base rate is set to the 7 years fixed swap rate but other base rates and spreads could also be considered.

# 5.2.3. Return Analysis

With assumptions of Unibet's future performance and with a financial structure of 35 % equity and 65% debt we got an IRR of 24,8% and a cash return on 3,03x which is considered to be a good return on an investment (Rosenbaum and Pearl, 2009, among others). If we had had an exit multiple of 11 instead, the IRR had been 31,3% and Unibet would have been seen as an even better investment.

The historical exit multiples for LBO transactions in size of Unibet's purchase price show variation that is above 9, why it should not be seen as impossible to get the high IRR and cash returns presented with an exit multiple of 10 or 11.

It is interesting to see the change in IRR and cash return when the financial structure has changed. By reducing the equity contribution to 25%, thus increase debt to 75%, everything else equal, (an exit in five years and exit multiplier of 9) the IRR increases to 28.3%. As in the previous example, an exit multiplier of 10 or 11 gives even higher internal rate of returns.

There are many variables which affect the IRR and therefore the results cannot be completely trusted. More or less all assumptions made affect the IRR, and even though the assumptions are as trustful as possible it is impossible to foresee future performances. However, one must remember that one of the main uses of an LBO model is to create different possible scenarios of the company's performance, financial structures and purchase price in order to valuate different strategies.

With evidence found throughout this thesis, Unibet Group Plc. seems to fulfill many of the requirements and should be considered as a possible LBO candidate.

# 6. Conclusion

In order to investigate whether Unibet Group plc. is a good candidate for leveraged buyout two different approaches were used. First an investigation on whether Unibet had the characteristics of a well- suited LBO candidate found in books and previous studies. The characteristics found in Unibet were:

- Strong cash flow
- Low financial distress costs
- Leading and defensible market position
- Growth opportunity
- Low capital expenditures requirement
- Strong asset base

Evidence of efficiency opportunities, low Tobin's q and strong management were unfortunately not possible to reveal. However, Unibet has got the other qualities listed, which implies it has potential of being a good LBO candidate.

The LBO valuation model was constructed in line with Rosenbaum and Pearl, 2009. With equity contribution of 35% and debt level of 65% debt repayments and interest payments could be done through the generated cash flow. The IRR is 24,8% and the cash return is 3,03 which private equity firms see as a very good return. With different exit multiplies and/ or increased debt, the return on the investment could quickly change from good to bad or from good to excellent. This show clearly

how small changes in the variables can change IRR drastically and change an important decision from perhaps not recommend an LBO to highly recommend it.

Overall, the IRR and cash return showed very good results indicating Unibet is appropriate for an LBO. Based on the framework of this thesis, Unibet is an appropriate candidate for a leveraged buyout.

## 7. Discussion and Future Research

The LBO model used in this thesis is considered to be very alike the ones used at investment banks and I therefore believe the results are reliable. However, a professional investment banker should have some knowledge that I, without earlier experience, don't possess. Perhaps, she would have suggested a premium on the share price, which I now in the end of the thesis believe could improve the results reliability even more. The assumptions are based on historical results and standardized rates, which is why the LBO can't be one hundred percent bullet proof. But the LBO model is never completely reliable due to the many assumptions on future performance. No one can foresee the future.

Further research would be interesting in the triggers behind IRR and cash return. They are two of the most important results in the LBO and yet so fluctuated. I believe deepened investigations on today's many possible financial structures should be made. It would also be very interesting to investigate the efficiency improvement that may or may not occur in post-LBO companies and find some formula or mutual percentage increase due to it, which can be used as a variable in the model.

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