LBO Questions and Answers – Basic (22 Questions)

The LBO answers the question, what is the maximum price I can pay for a company given a desired IRR?

Higher leverage (debt) increases IRR for the same purchase price. PE firms cap leverage (usually at a Debt/EBITDA multiple, but sometimes at a Debt/Equity ratio of around 5x) to make the transaction feasible

201. Walk me through a basic LBO model

Normal LBO: outputs exit MOIC (multiple on invested capital) and IRR

An LBO is just an acquisition with a high D/E ratio and a planned exit

In an LBO model, step 1 is to make assumptions about the purchase price, debt/equity ratio, interest rate on debt and other variables. You might also assume something about the company's operations, such as revenue growth or margins, depending on how much information you have

You purchase a company with cash on hand, debt and equity in an LBO. Cash on hand = cash – min required cash. You use cash on hand to offset the cost of a purchase.

Step 2 create a sources and uses section, which shows how to finance the transaction and what to use the capital for. This also tells you how much investor equity is required

Step 3 adjust the company's BS for the new debt and equity figures, and also add in goodwill and other intangibles on the assets side to make everything balance

Step 4 you project out the company's IS, BS and CFS and determine how much debt is paid off each year, based on the available cash flow and the required interest payments

Step 5 final step you project out the company's IS, BS, and CDS and determine how much debt is paid off each year, based on the available cash flow and the required interest payments

You typically don't writeup or writedown assets in an LBO to reflect fair market value. This is because the deal is a change of ownership, not a direct purchase of assets like in purchase accounting

202. Why would you use leverage when buying a company?

To increase your returns

Rem any debt you use in an LBO is not your money, so if you're paying $5 billion for a company, it's easier to earn a high return on $2 billion of your own money and $3 billion borrowed from elsewhere vs $3 billion of your own money and $2 billion of borrowed money

A secondary benefit is that the firm also has more capital available to purchase other companies bc they've used leverage

203. What variables impact an LBO model the most?

Purchase and exit multiples have the biggest impact on the returns of a model. After that, the amount of leverage (debt) used also ahs a significant impact, followed by operational characteristics such as revenue growth and EBITDA margins

204. How do you pick purchase multiples and exit multiples in an LBO model?

The same way you do it anywhere else: you look at what comparable companies are trading at, and what multiples similar LBO transactions have had. As always, you also show a range of purchase and exit multiples using sensitivity tables

Sometimes you set purchase and exit multiples based on a specific IRR target that you're trying to achieve – but this is just for valuation purposes if you're using an LBO model to value the company

205. What is an ideal candidate for an LBO?

Ideal candidates have stable and predictable cash flows, low risk businesses, not much needed for ongoing investments like capex, as well as an opportunity for expense reductions to boost their margins. A strong management team also helps, as does a base of assets to use as collateral for debt

The most important part is a stable cash flow

206. How do you use an LBO model to value a company, and why do we sometimes say that it sets the floor valuation for the company?

You use it to value a company by setting a targeted IRR (for example, 25%) and then back-solving in excel to determine what purchase price the PE firm could pay to achieve that IRR

This is sometimes called a "floor valuation" bc PE firms almost always pay less for a company than strategic acquirers would

207. Give an example of a "real-life" LBO

The most common example is taking out a mortgage when you buy a house. Here's how the analogy works:

1. Down payment: investor equity in an LBO

2. Mortgage: debt in an LBO
3. Mortgage interest payments: Debt interest in an LBO
4. Mortgage repayments: debt principal repayments in an LBO
5. Selling the house: selling the company/taking it public in an LBO

208. Can you explain how the BS is adjusted in an LBO model?

First, the liabilities and equities side is adjusted – the new debt is added on, and the shareholders' equity is wiped out and replaced by however much equity the private equity firm is contributing

On the assets side, cash is adjusted for any cash used to finance the transaction, and then goodwill and other intangibles are used as a "plug" to make the BS balance

Depending on the transaction, there could be other effects as well – such as capitalized financing fees added to the assets side

209. Why are goodwill and other intangibles in an LBO?

Rem these both represent the premium paid to the fair market value of the company. In an LBO, they act as a "plug" and ensure that the changes to the liabilities and equity side are balanced by changes to the assets side

210. We saw that a strategic acquirer will usually prefer to pay for another company in cash – if that's the case, why would a PE firm want to use debt in an LBO?

It's a different scenario because:

1. The PE firm does not intend to hold the company for the long-term – it usually sells it after a few years, so it is less concerned with the "expense" of cash vs. debt and more concerned about using leverage to boost its returns by reducing the amount of capital it has to contribute upfront
2. In an LBO, the debt is "owned" by the company, so they assume much of the risk. Whereas in a strategic acquisition, the buyer "owns" the debt so it is more risky for them

211. Do you need to project all 3 statements in an LBO model? Are there any shortcuts?

Yes, there are shortcuts and you don't necessarily have to project all 3

For example, you do not need to create a full Balance Sheet – bankers sometimes skip this if they are in a rush. You do need some form of Income Statement, something to track how the Debt balances change and some type of Cash Flow Statement to show how much cash is available to repay debt

A full BS is not strictly require, bc you can just make assumptions and the net change in working capital rather than looking at each item

212. **How would you determine how much debt can be raised in an LBO and how many tranches (portions) there would be?**

Usually you would look at comparable LBOs and wee the terms of the debt and how many tranches each of them used. You would look at companies in a similar size range and industry and use those criteria to determine the debt you company can raise

213. **Let's say we're analyzing how much debt a company can taken on, and what the terms of the debt should be. What are reasonable leverage and coverage ratios?**

This is completely dependent on the company, the industry and the leverage an coverage ratios for comparable LBO transactions

To figure out these numbers, you would look at debt comps showing the type, tranches, and terms of debt that similarly sized companies in the industry have used recently

There are some general rules: for example, you would never lever a company at 50x EBITDA, and even during the bubble leverage rarely exceeded 5-10x EBITDA

214. **What is the difference between bank debt and high-yield debt?**

This is a simplification, but broadly speaking there are 2 types of debt: bank debt and high-yield debt. There are many differences, but here are a few of the most important ones:

1. High-yield debt tends to have higher interest rates than bank debt (hence the name high-yield)
2. High yield debt interest rates are usually fixed, whereas bank debt interest rates are floating, they change based on LIBOR (London Interbank Offered Rate) or the fed interest rate
3. High-yield debt has incurrence covenants while bank debt has maintenance covenants. The main difference is that incurrence covenants prevent you from doing something (like selling an asset, buying a factory, etc.) while maintenance covenants require you to maintain a minimum financial performance (for example, the debt/EBITDA ratio must be below 5x at all times)
4. Bank debt is usually amortized – the principal must be paid off over time – whereas with high yield debt, the entire principal is due at the end (bullet maturity)

Usually in a sizable LBO, the PE firm uses both types of debt

There are again many different types of and this is a simplification but it's enough for entry level interviews

215. Why might you use bank debt rather than high-yield debt in an LBO?

If the PE firm or the company is concerned about meeting interest payments and wants a lower cost option, they might use bank debt. They might also use bank debt if they are planning on major expansion or capex and don't want to be restricted by incurrence covenants

216. Why would a PE firm prefer high-yield debt instead?

If the PE firm intends to refinance the company at some point or they don't believe their returns are too sensitive to interest payments, they might use high-yield debt. They might also use the high-yield option if they don't have plans for major expansion or selling off the company's assets

217. Why would a private equity firm buy a company in a risky industry, such as technology?

Although technology is more "risky" than other markets, remember that there are mature, cash flow-stable companies in almost every industry. There are some PE firms that specialize in very specific goals, such as:

1. Industry consolidation – buying competitors in a similar market and combining them to increase efficiency and win more customers
2. Turnarounds – taking struggling companies and making them function properly again
3. Divestitures – selling off divisions of a company or taking a division and turning it into a strong stand-alone entity

So even if a company isn't doing well or seems risky, the firm might buy it if it falls into one of these categories

218. How could a private equity firm boost its return in an LBO?

1. Lower the purchase price in the model
2. Raise the exit multiple/exit price
3. Increase the leverage (debt) used
4. Increase the company's growth rate (organically or via acquisitions)
5. Increase margins by reducing expenses (cutting employees, consolidating buildings, etc.)

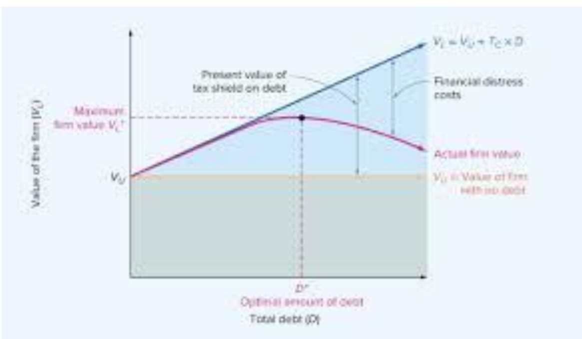
Note that these are all “theoretical” and refer to the model rather than reality – in practice it’s hard to actually implement these

219. What is meant by the tax shield in an LBO?

This means that the interest a firm pays of the debt is tax deductible, so they sabe money on taxes and therefore increase their cash flow as a result of having debt from the LBO

Note, however, that their cash flow is still lower than it would be without the debt – saving on taxes helps, but the added interest expenses still reduce NI over what it would be for a debt free company

There is an optimal balance of debt and equity to maximize the firm’s enterprise value. Debt also reduces net income though



220. What is a dividend recapitalization (dividend recap)?

A dividend recapitalization is when a company takes on new debt to pay a special, one time cash dividend to its shareholders. This is different than traditional dividends because those are paid out of a company’s profits

In a dividend recap, the company takes on new debt solely to pay a special dividend out to the PE firm that bought it

It would be like if you made your friend take out a personal loan just so he/she could pya you a lump sum of cash with the loan proceeds

As you might guess, dividend recaps have developed a bad reputation, though they’re still commonly used

221. Why would a PE firm choose to do a dividend recap of one of its portfolio companies?

Primarily to boost returns. Rem all else being equal that more leverage means a higher return to the firm

With a dividend recap, the PE firm is recovering some of its equity investment in the company and as we saw earlier, the lower the equity investment, the better, since it's easier to earn a higher return on a smaller amount of capital

222. How would a dividend recap impact the 3 financial statements in an LBO?

No changes to IS. On BS debt would go up and shareholders' equity (retained earnings) would go down and they would cancel each other out so that everything remained in balance

On the cash flow statement, there would be no changes to cash flow from operations or investing, but under financing the additional debt raised would cancel out the cash paid out to the investors, so net change in cash would not change