

Have you ever wondered why there are so many positions in the field of investment banking that pay enormous salaries? According to the IMF, 45% of the vacancies are still vacant due to the lack of the skills that are required to clear the job interview to become an Investment banker. For this reason, we have prepared a list of top Investment Banking interview questions that will help you in acing your job interview. All the questions mentioned below have previously been asked in interview rounds by top Investment Banks. Going through all of them will provide you with enough confidence and an idea about what to expect in an interview.

Top Investment Banking Interview Questions and Answers

Investment Banking is a highly competitive and rewarding field in the world of finance. The selection criteria followed by some top Investment Banks like Godman Sachs and Morgan Stanley can be very challenging. There are many rounds involved when you apply for a position of an Investment Banker and the interview round is one of the most crucial. Keeping this in mind, we have prepared the list of the top 35 most asked interview questions along with their answers.

The questions will be further categorized into three different categories:

- **Basic Investment Banking Interview Questions**
- **Intermediate Investment Banking Interview Questions**
- **Advanced Investment Banking Interview Questions**

Basic Investment Banking Interview Questions

1. Who is an Investment Banker?

An Investment Banker is responsible for helping businesses and governments raise capital and providing assistance when a company wants to merge or acquire another company.

An investment banker is involved in various financial activities like arranging finances, underwriting deals for clients, equity financing, negotiating with acquisitions and mergers, etc.

2. What are the three financial statements?

- **Income Statement** – The income statement is a financial statement that shows the company's profitability. It starts with the revenue line and works its way down to net income after deducting various expenses. The income statement is for a specific time period, such as a quarter or year.
- **Balance Sheet** – The balance sheet does not cover the full period, but rather provides a snapshot of the company at a given point in time, such as the end of the quarter or year. The number of assets and liabilities must always match the sum of equity and liabilities.
- **Cash Flow Statement** – The statement of cash flows is a magnified version of the cash account on the balance sheet that accounts for the entire period, reconciling the cash balance at the beginning and end of the period.

It is usually calculated by taking net income and adjusting it for different non-expenses and non-cash revenue to get at cash from operations. The cash from investment and financing is then added to the cash flow from operations to calculate the net cash change for the year.

3. How can a company be valued?

There are two different ways of valuing a company, namely the Intrinsic Value (discounted cash flow valuation) and the Relative Valuation method.

- **Intrinsic Value (DCF):** Without making comparisons to any other firms, intrinsic valuations look at a company's value based on its estimated cash flows.

This method of valuation, despite being essentially subjective, helps investors in estimating how much money they might make from an investment after adjusting for the value of money.

- **Relative Valuation method:** The second strategy entails identifying a comparable peer group, which consists of companies in the same industry with comparable operational, growth, risks, and return on capital characteristics.

True, identical companies do not exist, of course, but you should try to discover as many comparable organizations as possible. Determine the relevant industry multiples. To arrive at a valuation, take the median of these multiples and multiply it by the target company's relevant operating statistic.

4. How to calculate the cost of equity?

There are multiple ways to calculate the cost of equity, but the CAPM (capital asset pricing model) model is mostly used. The CAPM associates a security's predicted return with its sensitivity to the entire market basket.

The formula for the cost of equity is



5. What is higher - the cost of equity or the cost of debt?

Because the cost of debt is tax deductible, the cost of equity is always larger than the cost of debt. Furthermore, the cost of equity is higher since, unlike lenders, equity investors do not receive predictable payments.

Because interest payments are regarded as expenses, debt is less expensive. In a company's **capital structure**, debt is also prioritized. As a result, in the event of liquidation or bankruptcy, debt holders are paid first, followed by equity investors.

6. What is the formula for Enterprise Value?



7. What is Beta and how to calculate beta for a company?

The beta (β) of investment security (i.e., a stock) is a measure of its volatility of returns in comparison to the market as a whole. It serves as a risk indicator and is crucial to the Capital Asset Pricing Model (CAPM).

A higher beta means greater risk and higher expected profits for the company.

Because 1.0 is the benchmark for beta, everything above 1.0 is more variable and carries more inherent risk.



8. What is CAPM?

CAPM stands for Capital Asset Pricing Model. The CAPM explains the connection between the expected return and risk of investing in an asset. It demonstrates that the expected return on security equals the risk-free return plus a risk premium based on the security's beta.

CAPM Formula-



Where:

R_a = Expected return on a security

R_{rf} = Risk-free rate

B_a = Beta of the security

R_m = Expected return of the market

9. What is a deferred tax asset?

Deferred tax assets are resources that can be utilized for future tax reduction. It typically indicates that your company has overpaid taxes or paid taxes in advance, so it may anticipate recovering those funds in the future.

This occasionally occurs as a result of changes to tax laws that take place in the middle of the financial year. It can also happen when a company experiences a loss during a fiscal year since those losses might be applied to future taxable gains.

10. What is the difference between a merger and an acquisition?

The consolidation of two or more commercial companies to form one joint entity with a new management structure, ownership, and name that capitalizes on its competitive advantage and synergies is referred to as a merger.

In contrast, an acquisition occurs when a financially powerful entity takes over or buys a less financially strong commercial firm by acquiring all or a portion of its total shares.

11. What is DCF?

The term "discounted cash flow" (DCF) refers to a method of valuation that calculates an investment's value based on its anticipated future cash flows.

DCF analysis aims to evaluate the current value of an investment based on projected future earnings.

It can help those evaluating whether to acquire a firm or buy securities in making their selections. Business owners and managers can use discounted cash flow analysis to help them make operational and capital budget decisions.

Intermediate Investment Banking Interview Questions

12. What does Negative Working Capital mean?

Negative working capital occurs when a company's existing liabilities exceed its current assets. This means that liabilities paid within a year exceed monetizable working capital over the same period.

Buyers often view a target company's negative working capital as negative because it represents the additional capital needed to operate the company after closing.

A buyer wants a working capital ratio of 1 to 1.5, which indicates at least \$1 in current assets for every \$1 in current liabilities. This gives the buyer confidence that the company can make enough money in the short term to meet the seller's and payroll obligations.

13. What is the difference between cash-based accounting and accrual accounting?

When cash is actually received or spent, cash-based accounting records revenue and expenditures accordingly. However, accrual accounting records revenue when it is reasonably certain that it will be collected (i.e., when a customer has placed an order for the goods) and records expenses when they are incurred rather than when cash is actually spent.

Due to the widespread usage of credit cards and lines of credit for payment these days, most large organizations use accrual accounting; nevertheless, very small firms may choose to employ cash-based accounting in order to streamline their financial statements.

14. What is WACC and how do you calculate it?

The typical costs that businesses incur while financing capital assets are measured by the weighted average cost of capital (WACC).

Long-term liabilities and debts, such as preferred and ordinary stocks and bonds that businesses issue to shareholders and capital investors, can be included in capital costs.

Unlike calculating capital expenses, the WACC takes the weighted average of each source of capital for which a corporation is obligated.

Untitled

- **E** = equity market value
- **R** = equity cost
- **D** = debt market value
- **V** = the sum of the equity and debt market values
- **R_d** = debt cost
- **T_c** = the current tax rate for corporations

15. What is the difference between Goodwill and Other Intangible Assets?

When a firm is bought, a goodwill premium is given over the fair worth of the assets. As a result, it is associated with a company or business and cannot be bought or sold alone. Other intangible assets, such as licenses, patents, and so on, can be sold and purchased individually.

16. How to calculate Acquisition Premium?

The acquisition premium for a deal can be calculated simply by taking the difference between the amount paid per share for the target firm and the target's current stock price and dividing it by the target's current stock value to get a percentage amount.

Untitled

Where,

DP = Deal Price per share

SP = Current Price per share

17. What is Terminal Value and how do you calculate it?

The worth of a firm, project, or asset after the period for which future cash flows can be predicted is known as its terminal value (TV).

After the projected period, terminal value assumes a company will continue to expand at a specific pace indefinitely. A significant portion of the total assessed value is frequently made up of terminal value.

The formula for calculating the Terminal value is:

Untitled

Where

- FCF = free cash flow for the last forecast period
- g = terminal growth rate
- d = discount rate

18. Two companies are identical, except one has debt and the other does not; which will have the greater WACC?

The company without debt will be having a higher WACC as Debt is considered to be less costly compared to Equity:

- Interest on the debt is always tax-deductible.
- In a company's capital structure, debt is ranked above equity, meaning that debt holders would receive payment first in the event of bankruptcy or liquidation.
- Contrary to popular belief, debt interest rates are typically lower than the figures for the cost of equity (which are typically over 10%). As a result, the Cost of the Debt component of WACC will make up a smaller fraction of the overall sum than the Cost of the Equity component.

19. Describe the basics of the LBO model.

There are five steps involved in creating an LBO model.

The first step involves creating assumptions on the Purchase Price, Debt/Equity Ratio, Interest Rate on Debt, and other variables. Depending on the amount of information you have, you may also make assumptions regarding the business's activities, such as Revenue Growth or Margins.

The second step is to construct the Sources & Uses section that outlines your funding sources.

This also reveals how much the investor paid for the deal and what you did with the money and how much investor equity is necessary.

In order to balance everything, step three involves updating the company's balance sheet to reflect the new debt and equity amounts as well as adding goodwill and other intangibles to the assets side.

The fourth step entails projecting the income statement, balance sheet, and cash flow statement of the business in order to calculate the amount of debt that will be repaid annually based on the available cash flow and the necessary interest payments.

The fifth step involves making assumptions about the departure after a number of years—typically, an EBITDA Exit Multiple—and calculating the return based on how much equity is given to the company.

20. How is the balance sheet adjusted in an LBO model?

The additional debt is first added to the liabilities and equity side, and the shareholders' equity is then "wiped out" and replaced with the maximum equity the private equity firm is putting in.

Goodwill & Other Intangibles are used as a "plug" to make the Balance Sheet balance after Cash on the Assets side is adjusted for any cash used to fund the transaction.

There might be further implications as well, such as adding capitalized financing costs to the Assets side, depending on the transaction.

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

Below mentioned are some of the major differences between them:

- The interest rate is higher in high-yield debt compared to bank debt.
- Bank debt interest rates are not fixed like that of high-field debt, they tend to change based on the Fed interest rate and LIBOR.
- Bank debt has maintenance covenants, whereas high-yield debt has incurrence covenants. The primary distinction between the two is that incurrence covenants forbid you from taking certain actions, whereas maintenance covenants compel you to maintain a minimum level of financial performance (for instance, the Debt/EBITDA ratio must always be below 5x).
- When it comes to bank debt, the principal must often be amortized over time; but, with high-yield debt, the entire principal is payable at maturity (bullet maturity).

22. Why would a company refuse to pay 100% cash to another company if it was capable of doing so?

It may be conserving money for something else, or it may be anxious about running out if the business suffers a setback; its stock may also be trading at an all-time high, and it may be eager to put it to use

instead.

Advanced Investment Banking Interview Questions

23. How is GAAP accounting different from tax accounting?

The main difference between the two approaches is that under GAAP, all financial transactions must be documented and properly accounted for, whereas tax accounting concentrates on the activities that have an effect on the company's tax status while excluding other transactions. Moreover, tax accounting simply considers revenue/expense in the current quarter and how much income tax you owe, GAAP is more complicated and accurately monitors assets/liabilities.

24. Tell me about major items in Shareholder's Equity.

- **Common Stock** – The sort of stock most individuals invest in, is a common stock, which represents a portion of ownership in a business.
- **Retained Earning** – The amount of Net Income that has been “saved up” over time by the company.
- **Treasury Stock** – The monetary value of the shares purchased by the corporation.
- **Additional Paid in Capital** – This records the number of new shares created by employees exercising their stock options as well as the amount of stock-based remuneration that has been granted. It also takes into account how much extra money a business receives through an IPO or another equity issuance.
- **Accumulated Other Comprehensive Income** – This serves as a “catch-all” for various things that don't fit anywhere else, such as the impact of fluctuating exchange rates for foreign currencies.

25. What are examples of non-recurring charges that are added back to a company's EBIT/EBITDA when looking at its financial statements?

- Goodwill Impairment
- Restructuring Charges
- Asset Write-Downs
- Legal Expenses
- Bad Debt Expenses
- Change in Accounting Procedures
- Disaster Expenses

26. What is the difference between capital leases and operating leases?

Operating leases don't entail any ownership and are used for short-term leasing of property and equipment. On the Income Statement, operating lease expenses are displayed.

Capital leases are used for longer-term items and offer the lessee ownership rights; they depreciate and involve interest payments and are classified as debt.

27. What % dilution in Equity Value is “too high?”

There are no strict rules but many banks consider that anything over 10% is not good. It's not necessarily erroneous, but over 10% dilution is unusual for most companies, so you would want to double-check your numbers if your basic equity value is \$200 million and the diluted equity value is \$230 million.

28. Explain an IPO valuation for a firm that is about to go public.

- In contrast to usual valuations, we only consider comparable public company IPOs.
- We select similar public companies, choose the most pertinent multiple to apply, and base our estimate of our company's Enterprise Value on that multiple.
- Once we have Enterprise Value, we can work backward from there to get the Equity Value. We also take the IPO profits into account since they are "new" funds.
- The price per share is then calculated by dividing the entire number of shares—both existing and newly issued—by 100. This is what people mean when they say "An IPO valued at."

29. Explain the Sum-of-the-Parts analysis.

In the Sum-of-the-Parts analysis, you evaluate each division of an organization using distinct comparable and transactions, obtain distinct multiples, and then sum up the values of each division to determine the overall value of the organization.

For example, we have a manufacturing division with an EBITDA of \$200 million, an entertainment division with an EBITDA of \$200 million, and a consumer goods division with an EBITDA of \$150 million.

The median multiples for each division are 5x EBITDA for manufacturing, 8x EBITDA for entertainment, and 4x EBITDA for consumer goods. We have chosen comparable companies and deals for each division.

For our calculation, the total value of the company would be \$2.4 billion ($\$200 \times 5x + \$200 \times 8x + \$150 \times 4x$).

30. Why would we use the mid-year convention in a DCF?

This is due to the fact that any company's maximum cash flow does not always come at the end of any financial year, but can come evenly anytime in a year.

In the absence of a mid-year norm, we would use discount period numbers of one for the first year, two for the second, three for the third, and so on.

Instead, we'd use 0.5 for the first year, 1.5 for the second, 2.5 for the third, and so on with the mid-year convention.

31. What's the difference between Purchase Accounting and Pooling Accounting in an M&A deal?

The seller's shareholders' equity is eliminated when using purchase accounting, and the premium over that amount is recorded as Goodwill on the consolidated balance sheet following the acquisition.

Instead of dealing with Goodwill and the accompanying items that are formed, pooling accounting simply adds up the two shareholders' equity figures.

Since pooling accounting has certain restrictions, purchase accounting will be used in 99% of M&A transactions.

32. Why do deferred tax liabilities (DTLs) and deferred tax assets (DTAs) get created in M&A deals?

These are generated during the writing up and writing down of assets in a transaction, including both tangible and intangible assets.

A deferred tax asset is created by an asset write-down, and a deferred tax liability is created by an asset write-up.

Due to the frequent differences between an asset's "fair market value" and its book value, which appears on the balance sheet, you must write down and write up the asset.

A write-up of asset results in a deferred tax obligation since the new item will have a larger depreciation expense, which means you will pay less in taxes initially but will eventually have to pay them back, leading to the liability.

The inverse is true for an asset write-down and a deferred tax asset.

33. What's an Earnout and why would a buyer offer it to a seller in an M&A deal?

An Earnout is a contractual term that states that the seller of a firm will receive more pay in the future if the business meets specific financial targets, which are typically expressed as a percentage of gross sales or earnings.

An earnout provision can be used if an entrepreneur trying to sell a business is asking for a higher price than a buyer is willing to pay.

Usually, it is dependent on financial success or other objectives.

The buyer can say, "We'll offer you an additional \$20 million in 4 years if you can exceed \$200 million in revenue by then."

Buyers use it to reward sellers for maintaining high performance and to deter management teams from accepting the money and leaving.

34. Explain how a Revolver is used in an LBO model.

When you need more money to make your mandatory debt repayments than you have available, you use a revolving credit line.

Revolver Borrowing = $\text{MAX} (0, \text{Total Mandatory Debt Repayment} - \text{Cash Flow Available to Repay Debt})$.

Similar to how credit cards operate, the Revolver starts off "undrawn", meaning that you don't actually borrow money and don't build up a debt unless you need it.

Before you determine Mandatory and Optional Debt Repayments, you must add any necessary Revolver Borrowing to your running total of cash flow available for debt payback.

You presume that within the actual loan repayments, any Revolver Borrowing from prior years is paid off first with surplus cash flow before any Term Loans are repaid.

35. How to adjust the Income Statement in an LBO model?

The most common adjustments are:

- **Cost Savings** – Frequently, you think that the private equity firm reduces costs by laying off people, which could influence COGS, operating expenses, or both.
- **New Depreciation Expenses** – This is derived from the transaction's PP&E write-ups.
- **Interest Expense on LBO Debt** – Here, you must account for both cash and PIK interest.
- **New Amortization Expense** – This includes the amortization of both capitalized borrowing fees and written-off intangibles.
- **Common Stock Dividend** – Private corporations may pay a dividend recap to the PE investors even when they may not pay dividends to shareholders.
- **Sponsor Management Fees** – Private corporations may pay a dividend recap to the PE investors even when they may not pay dividends to shareholders.
- **Preferred Stock Dividend** – You must include Preferred Stock Dividends on the Income Statement if Preferred Stock was utilized to finance the transaction.