Industrials

Sector coverage · Industrials · interview preparation summary

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Classify an industrial company by sub-sector, customer and economic model, and explain why cyclicality, operating leverage and the aftermarket decide how a coverage banker frames it.

A coverage banker for industrials starts by saying which kind of industrial the client is, because the sector is a family of businesses with different customers and different cycles. The main groups are machinery and capital equipment, components and engineered products, building products, aerospace and defence, transport and logistics, and distribution. Place a company with three questions. Who is the customer, what drives that customer's spending, and how is the company paid. Revenue follows customers' investment and output, so industrials are cyclical, and the length of the cycle depends on the gap between a customer's decision and the company's shipment. Short-cycle businesses such as components and distribution typically track industrial activity within a few quarters. Long-cycle businesses such as large machines, aircraft and ships deliver from orders placed years earlier. Operating leverage turns a modest swing in revenue into a larger swing in profit, because plants, engineers and overheads are largely fixed. Contribution margin = (revenue − variable costs) ÷ revenue. A lost sale costs its contribution margin rather than the average margin, so earnings fall faster than sales in a downturn and recover faster in an upturn. The installed base is the second feature to look for. A company that sells machines also sells spares, service and upgrades for the life of the machine, and this aftermarket is often higher in margin and steadier than original equipment. Aftermarket share = aftermarket gross profit ÷ total gross profit. Pricing power is the third feature, meaning how fast cost inflation is passed to customers. For the banker this classification drives everything that follows. It tells you which metric to ask for first, which peers to use, which buyers and investors will care and how much debt the company can carry. A common mistake is to treat a diversified group as one business and apply one multiple. Another is to read a peak year as normal. A good answer names the sub-sector, the customer and driver, the economic model and the aftermarket share, and then says what that means for the pitch.

WORKED EXAMPLE: WHY THE AFTERMARKET CHANGES HOW A DOWNTURN HITS TWO MAKERS

Brackenfield Pumps is an invented maker of industrial pumps. It has original equipment sales of 150m at a 28% gross margin and aftermarket sales of 90m at a 45% gross margin, with fixed operating costs of 45m. Wexcombe Presses is an invented press maker with only original equipment sales of 240m at a 28% gross margin and the same fixed costs of 45m. In a downturn original equipment sales fall 30% at both companies and Brackenfield's aftermarket sales fall 5%. Conventions: fixed costs do not change, ignore tax, annual figures, gross margins stay the same.

Answer: Brackenfield: aftermarket 49.1% of gross profit, operating profit down 39.0% from 37.5 to 22.9. Wexcombe: operating profit down 90.8% from 22.2 to 2.0. Same fixed costs and original equipment shock, so the aftermarket mix explains the gap.

Interview tip: Name the sub-sector, then the customer and driver, then the aftermarket share, and finish with what it means for the multiple and the debt a company can carry. Quote the aftermarket share of profit, not of revenue.

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Read the metrics that place an industrial company, orders, backlog cover, incremental margins, returns and cash conversion, and say what normal and abnormal look like.

A banker preparing a pitch or reading a client's results looks at a short list of industrial metrics. Start with organic growth split into price, volume, currency and acquisitions, because price alone can flatter a year. Orders show demand before revenue does. Book-to-bill = orders ÷ revenue. A ratio above one means the backlog is growing, and a ratio below one for several quarters means revenue will weaken. Backlog gives visibility. Backlog cover = backlog ÷ next twelve months' revenue. Check the quality of the backlog, meaning how much is firm, how much can be cancelled and how much converts within a year. Margins matter through the cycle rather than at a point. Incremental margin = change in EBITDA ÷ change in revenue when sales rise, and the same ratio when sales fall is the decremental margin. Incremental margins in manufacturing often sit well above the average margin, typically in the high twenties to forties as a percentage, because fixed costs are already covered. EBITDA margins differ by sub-sector. Distributors typically earn single digits, machinery and components low to mid teens, and strong aerospace and aftermarket businesses higher. Returns show whether growth creates value. Return on

invested capital = after-tax operating profit ÷ (net working capital + fixed assets + goodwill), and it should be compared with the cost of capital. Cash conversion = (EBITDA − capex − change in working capital) ÷ EBITDA. Inventory days and capex against depreciation explain where cash goes. The usual mistakes are to quote peak margins as normal, to read book-to-bill without cancellations, and to praise cash conversion in a downturn when it is only a working capital release. A good answer gives the metric, the normal range for the sub-sector and what the client's number says.

WORKED EXAMPLE: READING SIX NUMBERS FOR AN INDUSTRIAL CONTROLS MAKER

Ivelcott Controls is an invented maker of factory control systems. This year orders were 520m and revenue 480m against 440m last year, with opening backlog of 600m of which 120m can be cancelled. EBITDA rose from 60m to 72m. Next year's revenue is expected to be 500m. Operating profit is 60m, invested capital 520m, capex 24m and the working capital increase 8m. Conventions: tax at 25%, the cost of capital is 9%, annual figures.

Answer: Book-to-bill 1.08, backlog 640 (cover 1.28 years, firm cover 1.04), incremental margin 30% against an average of 15.0%, return on invested capital 8.7% against a 9% cost of capital, cash conversion 55.6%.

> **Interview tip:** Give each metric with its normal range for the sub-sector and one line on what the client's number says. Always ask how much of a backlog is firm before quoting cover.

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Choose and defend the valuation approach for an industrial company, normalise cyclical earnings, pick the multiple that fits the sub-sector and describe the trading and precedent set.

Valuing an industrial is mainly a matter of choosing which earnings to capitalise. Enterprise value to EBITDA is the usual starting multiple. Enterprise value to EBIT is better when depreciation differs widely between peers, as in transport equipment or capital-heavy distribution. Price to earnings is used for listed comparisons but misleads at the extremes of the cycle. Cyclical earnings are lowest at the trough and highest at the peak, so a multiple looks high on trough earnings and low on peak earnings. A buyer who pays a low multiple of peak earnings can overpay. Normalise by using mid-cycle earnings. Mid-cycle EBITDA = mid-cycle revenue × mid-cycle margin. Apply the peer multiple on a like-for-like basis, either both on mid-cycle or both on current earnings, and never mix them. Value a high-aftermarket business above a pure equipment maker, and a distributor on EBITDA together with return on capital, because its margin is thin and its working capital heavy. Conglomerates are valued as a sum of the parts, with central costs capitalised and a possible holding discount. Cash flow methods fit mature, steady companies. A discounted cash flow needs an explicit cycle and a terminal value on mid-cycle cash flow. The bridge from enterprise value to equity value deducts debt, pension deficits, leases where they are in the multiple, minorities and other debt-like items such as environmental liabilities. For precedents choose deals in the same sub-sector and the same part of the cycle, show the control premium and note synergies from procurement, footprint and overheads. Common mistakes are to apply a trough multiple to peak earnings, to mix peer sets of different aftermarket mix, and to forget the pension deficit.

WORKED EXAMPLE: A FASTENER MAKER VALUED ON TROUGH AND MID-CYCLE EARNINGS

Dunmere Fasteners is an invented components maker whose earnings are near a trough. Last twelve months EBITDA is 45m and mid-cycle EBITDA is 70m. Peers trade at 11.0 times current EBITDA, which is also depressed, and at 8.0 times mid-cycle EBITDA. Dunmere has net debt of 120m, a pension deficit of 30m treated as debt, and 100m shares. Conventions: ignore tax on the deficit, no minorities or leases, values at the start of the year.

Answer: Enterprise value 495 (11.0 × 45) to 560 (8.0 × 70). After 120 of net debt and 30 of pension deficit, equity is 345 to 410, or 3.45 to 4.10 per share. The top end is 12.4 times current EBITDA.

> **Interview tip:** State which earnings you are capitalising before you state a multiple. Show the pension and other debt-like items in the bridge, because bankers who forget them lose credibility.

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Explain what drives M&A, equity and debt capital markets activity in industrials, who the typical buyers and sellers are, what investors and lenders ask, and which pitch ideas a coverage banker brings.

Industrials generate a steady flow of advisory and capital markets work because portfolios, cycles and balance sheets keep changing. In M&A the main drivers are portfolio reshaping, consolidation, aftermarket build-out and technology. Diversified groups sell or spin off non-core divisions to sharpen focus and close a sum-of-the-parts discount. Fragmented areas such as distribution and components consolidate for scale, procurement savings and density. Equipment makers buy service and software businesses to grow the recurring share of profit. Buyers are strategic groups, private equity sponsors and, for carve-

outs, sometimes a management team. Sponsors prefer early recovery and sell into strength, while strategic buyers are most active when their own share prices are high. Defence and some aerospace deals face security and ownership reviews, and horizontal deals in concentrated markets face competition review. In equity capital markets, investors in an industrial IPO or spin-off ask about mid-cycle margin, order book quality, aftermarket share, cash conversion and return on capital, and they typically apply a discount for cyclicality. Windows open when orders are rising and close when they roll over, so timing matters. Sponsor sell-downs and blocks follow strong share prices. In debt capital markets, agencies rate industrials through the cycle, so leverage is tested on trough rather than peak earnings. Leverage = (net debt + pension deficit + factored receivables) ÷ EBITDA. Investment grade groups issue bonds for acquisitions and refinancing, and sponsor-owned companies use leveraged loans and high yield. Transport equipment and fleets can also be financed against assets. Typical pitch ideas are a carve-out or spin-off, a strategic review, an aftermarket bolt-on, a dual-track sale, a refinancing before a maturity wall, and a convertible to fund growth. The usual mistake is to pitch a deal that ignores where the sub-sector is in its cycle.

WORKED EXAMPLE: CHOOSING A PITCH IDEA FOR A DIVERSIFIED GROUP

Marlowe Group is an invented listed industrial with three divisions. Aerospace Services has EBITDA of 60m and peers at 11.0 times, Industrial Pumps has 70m at 8.0 times, and Distribution has 50m at 6.0 times. Central costs are 15m, capitalised at 7.0 times. The market enterprise value is 1,200m and net debt is 480m. Conventions: ignore tax, fees and stranded costs, all EBITDA figures are current and use the stated multiples.

Answer: Sum of the parts 1,415 against market 1,200, a 15.2% discount. Leverage 2.9 times now, 1.6 times after selling Distribution for 300. Pitch a Distribution sale first and hold the Aerospace Services spin-off in reserve.

> **Interview tip:** Link every pitch idea to a number the client can see: the discount to the sum of the parts, a leverage ratio, or a maturity date. Mention the buyer universe and the cycle position as well.

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Spot the cycle risks and accounting traps in an industrial company's numbers, and run a compact analysis of an invented company to a view for the client.

Industrial risks are mostly visible in the numbers if the banker knows where to look. Customer concentration, input cost lags and fixed-price contracts are the main operating risks. Commodity costs such as steel rise before contracts reprice, so margins squeeze first and recover later. Legacy liabilities such as pensions, environmental claims and product warranties act like debt. Revenue on long contracts is recognised over time using estimates of cost to complete, so a favourable revision can create a catch-up gain and an unfavourable one a charge. Check whether contract assets are growing faster than revenue. Customer advances can flatter cash conversion at the peak and reverse in a downturn. Capitalised development costs raise EBITDA without raising cash. Restructuring charges that recur every year are an operating cost, not an add-back. Channel stuffing means selling more to distributors than they sell on. Sell-in growth well above sell-through growth, with distributor stock weeks rising, signals it. Factoring and supplier finance move debt out of net debt and into working capital, so adjust for them. A compact analysis follows a fixed order. Classify the company, place it in its cycle, test the quality of earnings, normalise EBITDA, value it on matched multiples, test leverage on trough earnings and reach a view. Adjusted net debt ÷ adjusted EBITDA = (net debt + factoring and pension debt) ÷ (EBITDA after removing add-backs, capitalised costs and one-off gains). The usual mistake is to accept the company's adjusted EBITDA and net debt as given. A good answer names the two or three adjustments that change the conclusion, says by how much, and states the view for the pitch.

WORKED EXAMPLE: QUALITY OF EARNINGS AT A HYDRAULICS MAKER

Garrowby Hydraulics is an invented maker with revenue of 600m and company-adjusted EBITDA of 110m, which adds back a restructuring charge of 14m. Similar charges of 14m occurred in each of the last three years. It capitalised 10m of development cost and booked a 6m favourable catch-up on a long contract. Reported net debt is 200m, and it has sold 25m of receivables with recourse. The peer multiple is 9.0 times. Conventions: ignore tax, annual figures, treat the factored receivables as debt.

Answer: Adjusted EBITDA 80 against 110 (down 27%), adjusted net debt 225, leverage 2.8 times against 1.8 times, and enterprise value 720 against 990 at 9.0 times.

> **Interview tip:** Give the two or three adjustments in order of size, say what each does to EBITDA or debt, and then say what you would tell the client. Do not accept a company's adjusted figures without rebuilding them.

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Map the industrial sub-sectors, giving for each the business model, demand driver, economic model, first metrics, the usual misread and how the product groups meet it.

Industrials is seven sub-sectors, and a coverage banker names the sub-sector first, then the driver, then the numbers. The economic model matters too, because project, recurring, transactional and asset-backed businesses are valued and financed differently. Machinery and capital equipment makers sell project-based machines against customers' investment budgets plus a recurring service tail, so read orders, backlog and aftermarket share first, beware peak order intake, and expect portfolio M&A, spin-offs and investment grade bonds. Components and engineered products are parts designed into a customer's product, so demand follows customer output and content per unit, read customer production, destocking and price-downs first, beware a customer inventory correction, and expect sponsor deals and leveraged loans. Building products sell through merchants to housing and renovation, driven by starts, repair spending and rates, so read sell-through, merchant stock and price over cost first, beware a channel build, and expect consolidation and sponsor sales. Aerospace and defence suppliers deliver on long programmes for aircraft makers and governments, driven by build rates, flying hours and budgets, so read backlog cover, aftermarket share and programme margins, beware cost-to-complete estimates, and face security reviews in M&A and longer bond maturities. Distribution buys and resells other makers' products on a thin transactional margin, driven by customers' activity, so read gross margin, inventory days and return on capital, beware price inflation that flatters growth, and expect bolt-on acquisitions and working capital financing. Transport equipment builds trucks, trailers, rail cars and ships against production slots, driven by freight volumes and fleet age, so read the order book, used-equipment prices and residual values, beware peak orders, and expect asset-backed and captive finance. Transport and logistics services move goods for a fee, driven by trade volumes and capacity, so read yield per unit, load factor and operating ratio, beware fuel and contract lags, and expect infrastructure-style and high yield financing. Treat these seven as the standard map, and say so when a company straddles two, for example a components maker with a large aftermarket. In an answer say the sub-sector, then the demand driver, then the two or three metrics, and finally what it means for the product group that is pitching.

WORKED EXAMPLE: THREE INDUSTRIALS, THREE SETS OF FIRST METRICS

Corvane Aerostructures is an invented aerospace supplier with backlog of 900m, next-year revenue of 480m and an EBITDA margin of 17% on 450m of current revenue. Esker Roofing is an invented building products maker with sales to merchants of 320m, up 7%, price up 4% and merchant sell-through up 2%, while merchants' stock rose from 8 to 11 weeks of sales. Fenwick Industrial Supply is an invented distributor with revenue of 700m, a 24% gross margin, inventory of 98m, EBITDA of 49m and capital employed of 300m. Conventions: 52 weeks, 365 days, tax at 25%, depreciation of 7m for Fenwick.

Answer: Corvane: cover 1.9 years, EBITDA 76.5. Esker: volume up 2.9%, channel stock build 18.5. Fenwick: inventory days 67.2, EBITDA margin 7.0%, return on capital employed 10.5%.

> **Interview tip:** Open by naming the sub-sector, because that decides which three numbers you ask for. Then give the number, say what it means, and name the product group that has the idea.

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Place an industrial sub-sector in its cycle from leading, coincident and lagging indicators, and say what each stage means for M&A timing, issuance windows and valuation.

The industrial cycle has four stages, and a banker should place the client in its stage before advising on timing. In early recovery orders and quotes turn up while revenue and margins are still low and stock is lean. In expansion volumes, price, utilisation and backlog rise together, margins widen and growth absorbs cash. At late cycle or peak orders flatten, revenue peaks on backlog, margins are widest and inventory builds. In a downturn orders and cancellations fall first, decremental margins bite, price slips and falling stock releases cash that flatters early results. Machinery and capital equipment: orders, quotes and cancellations lead, shipments and utilisation are coincident, and margins and service revenue lag, with revenue typically following orders by several quarters or, for large machines, years. Components: customer production schedules and customer stock lead, shipments and price-downs are coincident, and margins lag, so a customer destock can undershoot end demand for a quarter or two. Building products: housing starts, permits and mortgage approvals lead, merchant sell-through and weeks of stock are coincident, and repair spending and margins lag, with sales typically following starts by a few quarters. Aerospace and defence: build rates, delivery slots and backlog cover lead, traffic and spares demand are coincident, and margins lag, so the cycle is usually longer and smoother. Distribution: manufacturers' orders and quote activity lead, branch same-day sales and price are coincident, and inventory days, rebates and bad debts lag, so a late stock build warns of markdowns. Transport equipment: order intake, used-equipment prices and fleet age lead, production rates and delivery slots

are coincident, and residual values and financing losses lag. Transport and logistics services: trade volumes, freight rates and capacity additions lead, load factors and yield are coincident, and operating ratio and fleet replacement lag. For M&A, sponsors typically buy in early recovery on mid-cycle earnings and sellers prefer to exit near the peak, so sell-side mandates are won in expansion and bids are best timed in early recovery. For issuance, equity windows tend to open in early recovery and expansion and close as orders roll over, while debt markets stay open longer but size leverage on trough earnings. For valuation, multiples look low at the peak and high at the trough, so apply them to mid-cycle earnings and ask what is priced in. Cycles differ in length by sub-sector, indicators are read together and never alone, and every pattern here is typical rather than a statistic.

WORKED EXAMPLE: PLACING A TRAILER MAKER AND A BEARINGS MAKER IN THE CYCLE

Hollin Trailers is an invented trailer maker. Over four quarters its book-to-bill was 1.10, 1.00, 0.90 and 0.78, cancellations rose from 2% to 9% of orders, used-trailer prices are down 14% year on year, quarterly revenue is steady at 100m, backlog is 640m and EBITDA margin is a record 14% against a mid-cycle 10%. Jarrow Bearings is an invented components maker with annual sales of 300m, all to customers who now hold 14 weeks of its parts against a normal 8 weeks, and a decremental margin of 35%. Conventions: annualise quarterly revenue by multiplying by four, 52 weeks, ignore tax.

Answer: Hollin: late cycle turning down (orders down 29%, cancellations 9%, cover 1.6 years, peak EBITDA 56 against mid-cycle 40). Jarrow: customer destock of 34.6, sales to 265.4 (down 11.5%), EBITDA hit about 12.1.

> **Interview tip:** Name the stage, support it with one leading, one coincident and one lagging indicator, then say what it changes for timing, financing and price. Say that no single indicator decides it.

Summary of the Charta interview-preparation topic. Companies and figures in the examples are invented. Draft content, not yet expert reviewed.