CHARTA LEARNING · INTERVIEW PREPARATION

Insurance Markets and Business Models

Interview preparation summary · IN track

IN THIS SUMMARY

- Who does what
- Economics

INT.NM.1.a · Who does what

Distinguish direct insurers, brokers, agents, managing general agents and reinsurers by who carries the risk, who acts for whom and how each is paid.

The insurance chain has different players with different jobs. A direct insurer takes premium and carries the risk on its balance sheet. A broker acts for the client, advises, shops the risk to insurers and is typically paid brokerage, a percentage of premium taken from the premium. An agent often acts for one insurer or a small panel, and is usually paid commission. A managing general agent, or MGA, is a specialist underwriting firm that, under delegated authority, quotes and binds business on an insurer's behalf, often within set limits, while the insurer provides the capital. A reinsurer takes part of an insurer's risk in return for part of its premium. The key test is who bears the loss: brokers and MGAs usually do not, insurers and reinsurers do. Interviewers ask this to check you understand incentives. Because intermediaries are often paid on volume, the risk carrier needs controls such as limits, audits and profit-linked pay. The usual mistake is to call a broker an insurer, or to forget that brokers act for the buyer.

WORKED EXAMPLE: FOLLOWING ONE PREMIUM THROUGH THE CHAIN AT TARNBURY AND OSTRANDER

Harrowgate Logistics, an invented haulier, pays GBP 480,000 for fleet cover placed by Tarnbury Brokers, an invented broker, with Ostrander Insurance, an invented insurer. Brokerage is 15% of premium. Ostrander cedes a 40% quota share of the net premium to Wexmoor Re, an invented reinsurer, which pays a 25% ceding commission. Ostrander's own expenses are 10% of net premium. A claim of GBP 300,000 occurs. What is Ostrander's result? Convention: one claim, no investment income, no tax, no reinstatements.

Answer: Ostrander makes a result of 64,800 on this one claim, the reinsurer makes 2,400, and the broker earns 72,000 brokerage for acting for the client and carries no loss.

> **Interview tip:** Say who bears the loss first: the insurer and reinsurer do, the broker does not. Then say how each is paid: premium for the carrier, brokerage for the broker, ceding commission for the reinsurance relationship.

INT.NM.1.b · Who does what

Compare distribution channels (direct, aggregator, bancassurance, agent and broker) by cost per sale, retention and fit, for personal and commercial lines.

Insurers reach customers through direct sales (own website, phone, app), price comparison sites or aggregators, banks and other partners (bancassurance), agents and brokers. Personal lines such as motor and home are standardised, high volume and mostly priced by models, so online and aggregator channels are common; commercial lines are bespoke, so advice, negotiation and a broker are usual, especially for larger or complex risks. The numbers that decide channel choice are acquisition cost per sale (marketing spend or commission divided by sales), that cost as a percentage of premium, and retention, because a customer who renews costs far less than a new one. Aggregators bring volume but customers often shop on price each year, so retention can be lower. Partners such as banks bring trusted customer access but take commission and may own the relationship. Interviewers ask this to see commercial awareness. The usual mistake is to compare only first-year cost and ignore retention and claims quality.

WORKED EXAMPLE: WHICH CHANNEL REALLY COSTS LESS AT CALDERFIELD HOME AND MOTOR

Calderfield, an invented insurer, compares four channels for motor. Direct online spends GBP 40,000 on advertising and gets 800 sales at an average premium of 560. An aggregator charges 9 per quote and 12% of quotes convert, at an average premium of 540. A bank partner is paid 18% commission on a premium of 580. An agent is paid 10% of a premium of 620. Retention is 72% a year for direct customers and 55% for aggregator customers. Compare cost per sale, then cost per policy-year over three years for direct and aggregator. Convention: retention applies to each year, no discounting, first-year costs only.

Answer: Per sale, direct costs 50, the aggregator 75, the bank partner 104.4 and the agent 62. After retention, direct costs 22.3 per policy-year against 40.5 for the aggregator.

> **Interview tip:** Always give cost per sale, then adjust for retention and claims quality. Saying 'it depends on how long the customer stays and what they claim' shows commercial awareness.

INT.NM.1.c · Who does what

Explain how a subscription market placement works, including leader and follower roles, lines written and signed, and each carrier's share of premium and loss.

In subscription markets, such as the London market and its equivalents elsewhere, a large or specialist risk is often shared between several insurers, each taking a percentage or line. The broker typically approaches a lead underwriter first, who often sets price and terms, then offers the other carriers the chance to follow. Each carrier writes a line, meaning the share it is willing to take. If the written lines add to more than 100%, they are typically scaled down so that signed lines add to 100%, though practice varies by market. Each carrier then receives its signed share of premium after brokerage and pays its signed share of each loss. A broker may also place business through coverholders using delegated authority. Interviewers ask this to test whether you can follow shares and incentives. Risks for followers are relying on the lead's pricing and information without doing their own analysis. The usual mistake is to apply a written line to premium without scaling, which makes the shares add to more than 100%.

WORKED EXAMPLE: SIGNING DOWN A PROPERTY PLACEMENT FOR BRIGHTWATER DISTRIBUTION

Brightwater Distribution, an invented warehouse owner, buys property cover with a gross premium of GBP 2.4m and brokerage of 15%. Five invented insurers write lines of 40%, 30%, 25%, 20% and 15%. The placement is oversubscribed and signed down proportionately. A loss of GBP 8m later occurs. Find each insurer's signed line, premium and share of the loss. Convention: proportionate signing down, no expenses, no reinsurance.

Answer: Signed lines are 30.8%, 23.1%, 19.2%, 15.4%, 11.5%, net premium is 2,040,000 and the GBP 8m loss is shared in the same proportions, so the lead pays 2,461,538.

> **Interview tip:** Say 'written line is what the carrier offers, signed line is what it gets after scaling, and premium and loss both follow the signed line'. Then add that followers should still do their own analysis.

INT.NM.2.a · Economics

Describe the insurance cycle, explain what drives hard and soft markets and show with a loss-ratio calculation how falling rates erode margin.

Insurance pricing moves in cycles. In a soft market, capacity is plentiful, competition is intense, rates fall or stand still and terms loosen. In a hard market, capacity is scarce, often after large losses or reserve increases have eroded capital, so rates rise and terms tighten. The cycle persists because claims costs are not known when the policy is sold, results show up with a lag, and new capital, including alternative capital, is attracted when profits look good. The key arithmetic: the new loss ratio is the old one multiplied by (1 + claims cost trend) and divided by (1 + rate change), so falling rates with rising claims costs compound quickly. Interviewers ask this to test commercial awareness and discipline. A good answer says that growth in a soft market is often a warning sign and that reserve releases can flatter reported results. The usual mistake is to subtract percentages instead of multiplying them, which understates the damage.

WORKED EXAMPLE: THREE SOFT YEARS AT ALDWYCH PROPERTY INSURANCE

Aldwych, an invented property insurer, starts with a loss ratio of 62% and an expense ratio of 33%. For three years rates fall 5% a year while claims cost per policy rises 4% a year, with the same exposure. Then the market hardens and rates rise 10% a year for two years with claims cost still rising 4%. Find the loss and combined ratio after each phase. Convention: expense ratio held at 33%, no reserve changes, no change in mix.

Answer: The loss ratio rises from 62% to 81.3% after three soft years, a combined ratio of 114.3%, and only recovers to 72.7% after two years of +10% rate increases.

Interview tip: Give the multiplication formula, not a subtraction. Then add one sentence on what you would do: protect rate adequacy and accept losing volume.

INT.NM.2.b · Economics

Calculate loss, expense and combined ratios, explain the role of distribution cost, and weigh growth against margin using underwriting profit and investment income.

A general insurer's loss ratio is claims divided by premium, the expense ratio is acquisition and running costs divided by premium, and the combined ratio is the two added together. Below 100% the insurer makes an underwriting profit; above 100% it makes an underwriting loss that investment income on premiums held before claims are paid, sometimes called float, may or may not cover. Distribution cost, mainly commission and marketing, is usually the biggest part of the expense ratio. Because ratios are common rules of thumb, not fixed targets, a combined ratio of 98% can be fine for a long-tail line with large float and weak for a short-tail line with little float. The growth-versus-margin question is whether premium growth at a thinner margin adds more profit than slower growth at a better one. Interviewers ask this to test numerical comfort and judgement. The usual mistake is to chase growth in premium as if it were profit, or to cut expenses in ways that raise claims.

WORKED EXAMPLE: GROWTH OR MARGIN AT DUNMORE AND PELL

Dunmore and Pell are two invented insurers, each with premium of GBP 500m. Dunmore grows 20% at a combined ratio of 98%. Pell grows 5% at a combined ratio of 92%. Float is 1.5 times premium and earns 3.5% a year. Which makes more profit next year, and how bad could Dunmore's combined ratio be before it earns nothing? Convention: one year, float and yield as stated, no tax, no catastrophes beyond the combined ratio.

Answer: Pell earns 69.6m against 43.5m for Dunmore; total profit reaches zero at a 105.25% combined ratio.

Interview tip: Say 'premium is not profit; margin times volume is'. Then add what you would still check: whether Dunmore's growth is from underpriced business and how reserves look.

INT.NM.2.c · Economics

Contrast mutual and listed insurers and test a consolidation case with expense-ratio, synergy and payback arithmetic.

A listed insurer is owned by shareholders who expect a return on equity and can supply new capital by issuing shares. A mutual is owned by its policyholders, has no outside shareholders and typically aims for security, fair pricing and long-term capital strength, so it may accept a lower return, but it cannot easily raise equity and builds capital mainly by retaining surplus. Consolidation, meaning mergers and acquisitions, is common because many costs are fixed: systems, compliance and head office spread over more premium lower the expense ratio, and a bigger buyer may gain wider distribution, diversification and bargaining power. The test of a deal is whether cost savings after one-off integration costs justify the price, and whether the target's reserves are adequate and its customers stay. Interviewers ask this to test commercial awareness. The usual mistake is to average two expense ratios without weighting by premium, or to count savings that are not yet real.

WORKED EXAMPLE: A COMBINATION OF KESTREL GENERAL AND LUDLOW MUTUAL

Kestrel General, an invented listed insurer, has premium of GBP 800m and an expense ratio of 34%. Ludlow Mutual, an invented mutual, has premium of 400m and an expense ratio of 38%. After a combination, management expects to cut 3% of Kestrel's expenses and 8% of Ludlow's expenses, at a one-off integration cost of 30m. Find the combined expense ratio before and after savings and the payback. Convention: premium unchanged, no customer losses, savings full from year one.

Answer: The combined expense ratio falls from 35.33% to 33.64%, worth 20.32m a year, and the 30m integration cost pays back in about 1.5 years if the savings are real.

Interview tip: Weight by premium. Then say the deal also depends on reserves and retention, and that a mutual's members, not shareholders, are the audience when the owner changes.

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