



Financial Objective of Insurance Companies

Insurance companies generate a profit when they sell more in policy dollar amounts than they pay out in insured claims. As such, insurance companies have an objective of using a process called underwriting to examine every insurance applicant. They then make a determination about whether that client will be an asset or a liability, and make coverage offers accordingly. Insurance companies also utilize deductibles - the amount of money you have to pay out-of-pocket before insurance kicks in with the rest, and co-pays, or the portion of coverage you have to pay before insurance covers the remainder.

Many types of insurance have qualifiers that affect eligibility and premiums. For example, if you are 95 years old and in poor health, a life insurance or health insurance policy may not be available -- if it is, you will be required to take a physical exam and will likely be charged very high premiums. Insurers are, after all, trying to mitigate their own risk in covering you. Likewise, if you have a terrible driving record, with numerous collisions and citations, auto insurance will



cost you significantly more than someone who has never had an accident.

Responsibilities of Insurance Manager

- Manage operations and productivity at an insurance company.
- Create and modify procedures and documents related to policies.
- Assist in claims management.
- Identify and analyze risks associated with policies.
- Achieve target budgets.
- Minimize risk of financial loss.
- Obtain and oversee company insurance or related funds that management uses to cover costs such as disability benefits or lawsuits.
- Direct information for claimants.
- Preside over claims investigations.
- Review insurance policies.
- Manage insurance data for reports.
- Analyze statistical data, such as mortality, accident, sickness, disability, and retirement rates and construct probability tables to forecast risk and liability for payment of future benefits



- Determine premium rates.
- Ascertain cash reserves necessary to ensure payment of future benefits.

Performance Measurement Of Insurance Companies

What Is an Insurance KPI?

An insurance Key Performance Indicator (KPI) or metric is a measure that an insurance company uses to monitor its performance and efficiency. Insurance metrics can help a company identify areas of operational success, and areas that require more attention to make them successful. These KPIs are often used to compare companies in the insurance industry against each other to see which would be a better investment.

KPIs and Reporting in the Insurance Industry

The insurance industry is large and complicated. Insurance KPIs and reporting can be just as complicated. Most of the time, thinking about KPIs and reporting will give you a headache. At insight software, we like life to be simple. As



such, this blog post will break the insurance industry and its KPIs down into small bite sized pieces that you can easily digest. We will go over insurance KPI examples for the sales, claims, and finance departments, as well as how you can streamline your reporting process using insurance reporting solutions.

Sales KPIs for the Insurance Industry

Sales are the backbone of the insurance industry. You can have all the products you want, but without someone selling them, you can't make a profit. This section will go over the insurance KPI metrics that your company should be applying to its front-line staff:

- 1. Quote Rate** – The quote rate is the most fundamental insurance key performance indicator that can be used to gauge staff performance. The quote rate measures how many quotes a staff member has been able to provide compared to the number of leads they have contacted.
- 2. Quota Rate** – The name of this insurance KPI only differs by one letter from the previous, but measures something even more important than the quote rate. The



quota rate is used to measure the performance of staff in meeting their sales targets. It is important that a company doesn't set the quota so high that it is unattainable, or staff may feel demoralized and unmotivated. This rate can help set an appropriate quota.

3. Contract Rate – The contract rate insurance metric is straight forward. This KPI measures how many leads a staff member was able to contact vs. the total number of leads they reached out to.

4. Number of Referrals – This insurance KPI measures how many new clients were referred by existing clients against the total number of new clients over a given time period. This insurance metric helps gauge two different aspects. The first is how satisfied your existing clients are with your products and services. The second is how much of the company's growth is organic as opposed to being advertisement driven.

5. Bind Rate – The bind rate insurance KPI is useful as it measures individual performance of staff, showing who has the skills to close a deal. The bind rate is the



percentage of quotes that are converted into legally binding policies.

6. Percentage Pending – This is a typical insurance KPI used to evaluate how efficiently the team is working together. This measures how many policies at any given time are pending approval as a percentage of the total number of policies established. A high percentage pending can indicate a bottleneck in your company's workflow.

7. Sales Growth Rate – This insurance performance metric measures how much a company's sales have increased (or decreased) over a specific period. This metric is best utilized when broken into two different categories. It should be used to measure the number of new policies as well as the number of policy renewals, as these two figures can give you more insight into how the business is performing.

8. New Policies per Agent – You want to know who your top performing agent is, don't you? This insurance metric helps companies keep track of who their star



performers are, as well as bringing about some healthy competition between agents.

9. Retention Rate – Obtaining new clients can be a costly and time-consuming process. In fact, it is much more profitable for companies if they can renew an exiting policy. This key insurance metric tracks the percentage of policies that are renewed against the number of new policies issued.

10. Policies In-Force per Agent – This insurance metric isn't targeted at the agent specific level. It takes the total number of policies in-force and divides it by the total number of agents on staff. This insurance KPI can be used in conjunction with the retention rate metric and the sales growth rate to try and identify where inefficiencies are occurring.

The front-line staff are an integral component to any insurance company. However, they only represent one component of an insurer. These examples of sales KPIs in the insurance industry should give you a place to get started when analyzing your company's performance. On the other hand, if your company already has quite a few insurance performance



indicators in place, maybe it is time to create some new ones tailored to your specific operating structure.

Key Performance Indicators (KPI) to Use for Insurance Claims

The next large insurance business segment we will explore is claims. Ideally, an insurance company would like to see zero claims, as it would mean that all their policies are returning the maximum profit. However, the world is not an ideal place. Claims are a real part of the business, and insurers are often forced to pay on their policies. Check out these examples of KPIs in insurance that should be out-of-the-box for any insurance dashboard:

- 11. Average Cost Per Claim** – In the insurance industry, you are going to have to pay out on claims. That is just the nature of the business. The question is, how much are you going to be paying out? This insurance performance indicator helps estimate this by figuring out the average cost of each claim made. Using insurance reporting software, this data can help an insurer set its rates as well as give an indication of future financial performance.



12. Claim Frequency – This key insurance metric measures the likelihood of a loss. It does this by predicting how many claims are to be expected based on the number of policies outstanding. This can help a company manage cashflows, risk exposure, and rate setting.

13. Components of Claim Costs (CCC) – This is a key performance metric that the insurance industry relies on heavily. The CCC metric seeks to provide insight into what costs are associated with a claim. The costs are generally associated with the following items: legal fees, time to settle, administration costs, and report delays. This insurance metric can be used to identify inefficient business segments and reduce costs.

14. Average Time to Settle a Claim – This might not be an insurance performance metric that you would think of right away. However, it is crucial to any insurance company. The claim settlement time should be used to monitor different policy types as more complicated policies will obviously take longer. However, it is important that companies try to keep the



settlement time as low as possible, as it will increase client satisfaction and retention.

15. Client Satisfaction – This insurance KPI is a little tricky to implement and measure accurately. Most companies do it somehow through surveys, but this is a somewhat objective measure. Client satisfaction is probably best represented in client retention and policy renewal.

16. Problem Resolution Rate – The longer a problem drags on, the more money it will cost your company in resources that could be used for making money. It is important to try to resolve client problems as quickly and efficiently as possible.

17. Calls Handled within 24 Hours – This insurance metric is used to determine how efficient and effective a company's claims resolution team is. This KPI shouldn't be used entirely by itself. A company should also consider how many calls the team receives.

18. Underwriting Cycle Time – This insurance performance indicator measures the number of days it



takes the underwriting department of a company to process an insurance policy application. This top insurance KPI can highlight inefficient underwriters, which can have a negative impact on client satisfaction. In the worst-case scenario, the client binds a policy with a different insurer while you are still waiting for you underwriter to finish. This will have wasted the time and efforts of your agents, costing the company money.

19. Claims Ratio – The claims ratio is a very powerful insurance metric. It takes the number of claims made and divides them by the amount of insurance premium earned for a specific period. This can give insight into how the business is performing by looking for anomalies. A higher than normal ratio would indicate the potential of fraud, while a lower ratio could indicate people having issues making claims. This metric is best utilized when combined with other metrics to determine the root of the anomalies.

The insurance KPI metrics that we covered in the claims section tend to be fairly data heavy and require a bit of data manipulation in order to gain true insight. This leads us



directly into our next section about insurance dashboard software and insurance reporting solutions.

Financial KPIs for the Insurance Industry

Financial KPIs are at the heart of all reporting. Everyone wants to know how a company is doing financially. However, that doesn't mean that every industry has the same financial metrics. We have collected some insurance KPI examples that the finance department should be tracking:

20. Expense Ratio – How much does it cost you to earn each dollar? How much are your expenses? The expense ratio performance metric compares the company's total expenses to the premiums it generates over a specific time period. This can help identify if premiums are too low or the company can be more efficient.

21. Average Policy Size – This insurance metric measures the total amount of premium collected and divides it by the number of policies issued for a given time period. This can be used to assess a company's risk profile. Lots of small policies are less risky than one large policy.



22. Loss Ratio – No one likes losing, but it happens to the best of us. This insurance KPI divides the total claims payout and divides it by the total premium revenue. A high loss ratio may indicate that policy premiums are set too low.

23. Average Revenue Per Client – We can use this insurance metric to determine the maximum amount of money a company is willing to spend to obtain a new client. If a client is overly difficult to obtain, it might not be worth the potential revenue for the company.

24. Cost Per Quote – Most agents probably don't even think about this insurance KPI. It is something that the management team should be keeping track of. The cost per quote takes into consideration all the costs that the company incurs in order to get a quote in front of a potential client.

25. Cost Per Bind – This is an insurance metric that often gets overlooked even though it is very important. The cost per bind metric determines the incremental



cost of binding a new policy. It essentially represents the price a company pays to obtain a new client.

26. Cost Per Bind by Vertical – This insurance KPI builds on the cost per bind metric by breaking things down to a finer resolution. The metric breaks up your cost per bind by their verticals. For example, what is your cost per bind on auto policies vs. travel policies? This can help determine which verticals are more profitable and which are dragging the profits down.

27. Net Profit Margin – This is the official measure of “are you profitable.” If your net income isn’t positive, you aren’t making a profit. But, when you do have a net income that is positive, just divide it by the total revenue. This will give you your net profit margin. Above 10 percent is considered very healthy.

28. Administrative Costs Per Policy – This is a more detailed version of the expense ratio KPI that we talked about before. This one scrutinizes a specific cost that can really make or break policy profitability. This insurance KPI takes the cost of the policy administration



department and divides it by the number of policies outstanding.

Asset and Liability Management (ALM)

Asset and liability management (often abbreviated **ALM**) is the practice of managing financial risks that arise due to mismatches between the assets and liabilities as part of an investment strategy in financial accounting.

ALM sits between risk management and strategic planning. It is focused on a long-term perspective rather than mitigating immediate risks and is a process of maximising assets to meet complex liabilities that may increase profitability.

ALM includes the allocation and management of assets, equity, interest rate and credit risk management including risk overlays, and the calibration of company-wide tools within these risk frameworks for optimisation and management in the local regulatory and capital environment.



Often an ALM approach passively matches assets against liabilities (fully hedged) and leaves surplus to be actively managed.

ALM Scope

The exact roles and perimeter around ALM can vary significantly from one bank (or other financial institutions) to another depending on the business model adopted and can encompass a broad area of risks.

The traditional ALM programs focus on interest rate risk and liquidity risk because they represent the most prominent risks affecting the organization balance-sheet (as they require coordination between assets and liabilities).

But ALM also now seeks to broaden assignments such as foreign exchange risk and capital management. According to the Balance sheet management benchmark survey conducted in 2009 by the audit and consulting company PricewaterhouseCoopers (PwC), 51% of the 43 leading financial institutions participants look at capital management in their ALM unit.



The scope of the ALM function to a larger extent covers the following processes:

1. **Liquidity risk:** the current and prospective risk arising when the bank is unable to meet its obligations as they come due without adversely affecting the bank's financial conditions. From an ALM perspective, the focus is on the funding liquidity risk of the bank, meaning its ability to meet its current and future cash-flow obligations and collateral needs, both expected and unexpected. This mission thus includes the bank liquidity's benchmark price in the market.
2. **Interest rate risk:** The risk of losses resulting from movements in interest rates and their impact on future cash-flows. Generally, because a bank may have a disproportionate amount of fixed or variable rates instruments on either side of the balance-sheet. One of the primary causes are mismatches in terms of bank deposits and loans.
3. **Capital markets risk:** The risk from movements in equity and/or credit on the balance sheet. An insurer may wish to harvest either risk or fee premia. Risk is



then mitigated by options, futures, derivative overlays which may incorporate tactical or strategic views.

4. **Currency risk management:** The risk of losses resulting from movements in exchanges rates. To the extent that cash-flow assets and liabilities are denominated in different currencies.
5. **Funding and capital management:** As all the mechanism to ensure the maintenance of adequate capital on a continuous basis. It is a dynamic and ongoing process considering both short- and longer-term capital needs and is coordinated with a bank's overall strategy and planning cycles (usually a prospective time-horizon of 2 years).
6. Profit planning and growth.
7. In addition, ALM deals with aspects related to credit risk as this function is also to manage the impact of the entire credit portfolio (including cash, investments, and loans) on the balance sheet. The credit risk, specifically in the loan portfolio, is handled by a separate risk management



function and represents one of the main data contributors to the ALM team.

The ALM function scope covers both a prudential component (management of all possible risks and rules and regulation) and an optimization role (management of funding costs, generating results on balance sheet position), within the limits of compliance (implementation and monitoring with internal rules and regulatory set of rules). ALM intervenes in these issues of current business activities but is also consulted to organic development and external acquisition to analyse and validate the funding terms options, conditions of the projects and any risks (i.e., funding issues in local currencies).

Today, ALM techniques and processes have been extended and adopted by corporations other than financial institutions, e.g., insurance.

Ratio Analysis Of Insurance Company

Ratio Analysis is a form of Financial Statement Analysis that is used to obtain a quick indication of a firm's financial performance in several key areas. Ratios are used to measure different aspect of the organization, for example,



profitability, Underwriting ability, market risk of Insurance Company etc. Ratio Analysis as a tool possesses several important features. The data, which are provided by financial statements, are readily available. The computation of ratios facilitates the comparison of firms which differ in size and nature. Ratios can be used to compare a firm's financial performance with industry averages. In addition, ratios can be used in a form of trend analysis to identify areas where performance has improved or deteriorated over time.

Values used in calculating financial ratios are taken from the balance sheet, income statement, and statement of cash flows. These comprise the firm's "accounting statements" or financial statements. The statements' data is based on the accounting method and accounting standards used by the organization. Financial ratios quantify many aspects of a business and are an integral part of the financial statement analysis. Financial ratios are categorized according to the financial aspect of the business which the ratio measures.

Ratios we are using:

In the following section short description of these ratios are given:



a) Liquidity analysis

Current Ratio:

Current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations. The ratio is mainly used to give an idea of the company's ability to pay back its short-term liabilities (debt and payables) with its short-term assets (cash, inventory, receivables). The higher the current ratio, the more capable the company is of paying its obligations.

b) Underwriting ratios

Loss rate Ratio:

The amount of a company's net premiums that were allocated to underwriting costs, like commissions to agents and brokers, state and municipal taxes, salaries, benefits and other operational expenses. This ratio is determined by dividing the underwriting expenses total by net premiums earned. It is the measure of an insurer's business efficiency to investor, the lower the Loss rate ratio, which indicates the company is more efficient.



Expense Ratio:

It is a measure of what it costs an investment company to operate a mutual fund. An expense ratio is determined through an annual calculation, where a fund's operating expenses are divided by Net premium. The lower the ratio the company.

Combined Ratio:

Combined ratio is the addition of loss ratio and expense ratio, which shows in together how an efficient insurance company is to select the policy as well as control the underwriting expense. The lower the ratio the better efficiency it indicates.

c) Profitability ratios

Return on Revenue:

It is a measure of a corporation's profitability that compares net income to revenue. Return on revenue is calculated by dividing net operating income by revenue. This ratio indicates on the total revenue earned what portion is turning into profit. The higher the ratio the better it is for the company.

Return on Equity Capital (ROE)



This ratio measures how much profit the shareholder's investment has generated. A higher ROE percentage indicates that shareholders are receiving a better return on their investment.

Return on Assets (ROA)

This ratio measures how profitable a company is relative to its total assets. A high ROA indicates that management is effectively utilizing the company's assets to generate profit.

Investment Yield:

It indicates how much the company is earning from investment against its investment. Company would like to earn higher income on lower amount of investment. So, lower the ratio better investment efficiency it indicates.

d) Leverage ratios

Debt to Equity Ratio

It measure of a company's financial leverage calculated by dividing its total liabilities by stockholders' equity. It indicates what proportion of equity and debt the company is using to finance its assets. A high debt/equity ratio generally means



that a company has been aggressive in financing its growth with debt.



e) Market ratios

Price Earnings Ratio:

A valuation ratio of a company's current share price compared to its per-share earnings. In general, a high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E. However, the P/E ratio doesn't tell us the whole story by itself. It's usually more useful to compare the P/E ratios of one company to other companies in the same industry, to the market in general or against the company's own historical P/E.

Market Value to book value

This ratio indicates according to the record of the company what should be value of each share. Book value of share changes as per number share changes. If market value is greater than book value, the ratio will be greater than 1. On the other hand, in opposite case, when the ratio is lower than 1, it indicates the company reputation and shareholder expectations in the market is not favorable.



Risk Return Tradeoff

Risk-Return Tradeoff is the relationship between the risk of investing in a financial market instrument vis-à-vis the expected or potential return from the same.

RISK-RETURN TRADEOFF DEFINITION

While making investment decisions, one important aspect to consider is what one is getting in return for the investment being made. Though this is one of the first things investors think of, another aspect, though comparatively less discussed but equally as important, is the quantum of risk being taken while making the investment.

The relationship between these two aspects of investment is known as the Risk-Return Tradeoff. The theory deals with how much an investor is willing to risk in order to increase the chances of higher returns.



RISK-RETURN TRADEOFF IN-DEPTH

‘Risk’ is inherent in every investment, though its scale varies depending on the instrument. Return, on the other hand, is the most sought after yet elusive phenomenon in the financial markets. In order to increase the possibility of higher return, investors need to increase the risk taken. On the other hand, if they are content with low return, the risk profile of their investment also needs to be low.

THINGS TO NOTE

It is vital to note here that increasing risk does not guarantee higher return; it just raises the possibility of it. Thus, if an investor is seeking higher return, he’d need to increase the assumed risk else higher returns can’t be achieved.

To find the optimal combination of risk and return in a portfolio for a given investor, it is essential to understand the risk-taking ability, investment objective, and the time horizon available to achieve it.



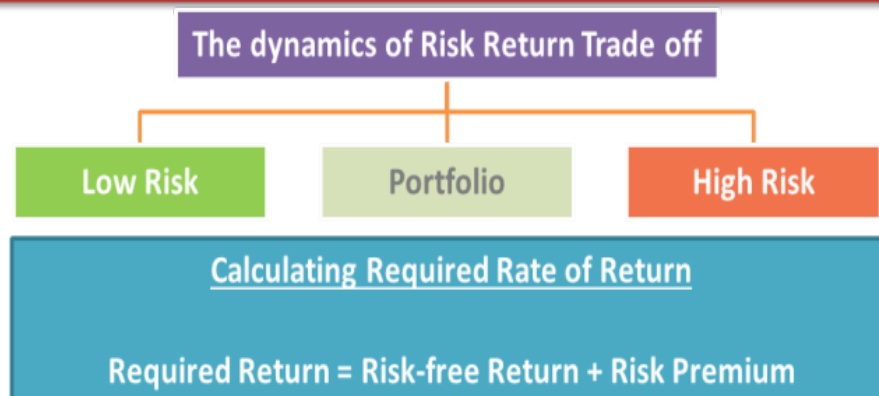
STANDARD DEVIATION

In the investment world, one of the simplest measurements of risk is via standard deviation which measures the deviance of returns from its mean over a given period of time. Risk can be considered to be the appetite for taking losses. A higher standard deviation indicates increased risk in an investment which signals that there are higher chances of losing one's capital in the investment.

As far as returns are concerned, they are a reward for parting with one's money. Since the reward in financial markets is not certain while making an investment, an investor parts with his money based on 'expected return' from the asset class.

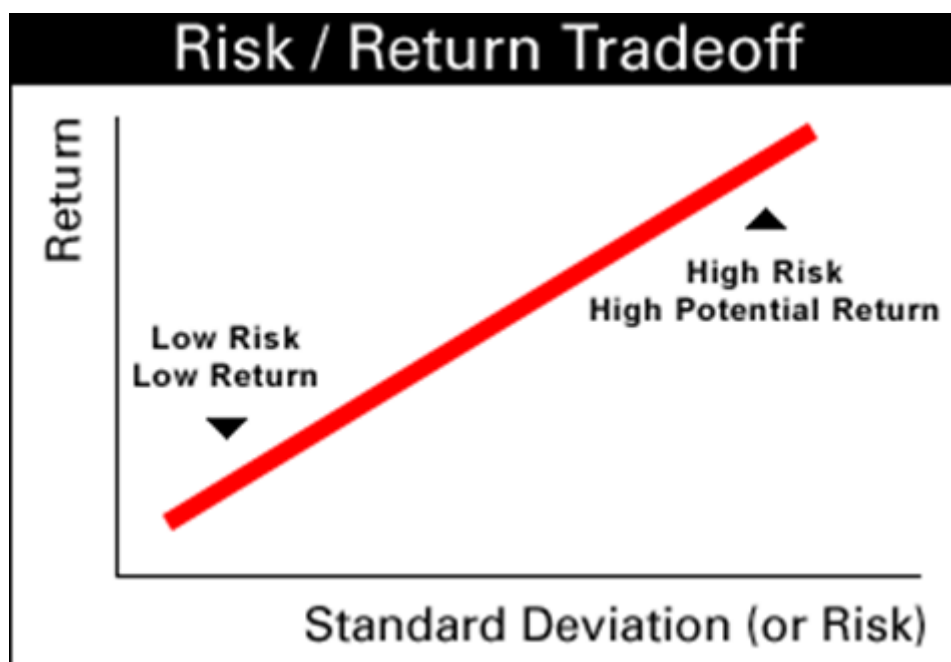
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THE DYNAMICS OF RISK-RETURN TRADEOFF

The graph below is a Risk-Return Trade off the graph. It shows the relationship between these two variables while making an investment.



LOW RISK

The bottom-left corner of the graph shows that there is low return for low-risk financial instruments. Government-issued bonds, for instance, US Treasuries, are considered to be the lowest risk financial instruments because they are backed up by the federal government. But due to the relatively non-speculative nature of the bonds, they have low



returns than bonds issued by corporations. In fact, while assessing the expected return of instruments, the return on government bonds is considered to be the risk-free rate.

HIGH RISK

As we move along the upward sloping line in the graph, the risk rises and so does the potential return. This is understandable as investors parting with their money for riskier assets would demand better returns than a risk-free security; else they have no reason to take that risk. This is the reason why the bonds issued by governments and corporations for the same duration have different yields as with corporate bonds, there is also a default risk priced into them which is not the case with federal bonds.

PORTFOLIO

So, it may seem like government bonds should form a significant portion of an investment portfolio given their near risk-free nature and the stability of returns. However, much higher returns provided by other instruments like high yield bonds, and other asset classes like equities is what induces investors to assume higher risk even though there is a possibility of capital loss there.



Technical Provision

The Basic Requirements

Under Solvency II, the technical provisions are made up of:

Claims provision + Premium provision + Risk margin

The claims provision is the discounted best estimate of all future cash flows (claim payments, expenses and future premiums) relating to claim events prior to the valuation date.

The premium provision is the discounted best estimate of all future cash flows (claim payments, expenses and future premiums due) relating to future exposure arising from policies that the (re)insurer is obligated to at the valuation date.

The risk margin is intended to be the balance that another (re)insurer taking on the liabilities at the valuation date would require over and above the best estimate. It is calculated using a cost-of-capital approach.



In normal circumstances, the valuation of the best estimate for claims provisions and for premium provisions should be carried out separately. Claims and premium provisions should be calculated gross of outwards reinsurance and for reinsurance. The risk margin need only be calculated net of reinsurance.

The discount rates to be used will be provided by EIOPA for all major currencies.

Data

The Solvency II Directive requires that insurance and reinsurance undertakings have internal processes and procedures in place to ensure the appropriateness, completeness and accuracy of the data used in the calculation of their technical provisions.

The EC Draft Level 2 guidance gives the following minimal criteria that must be met for data to be considered appropriate, complete and accurate.



Appropriateness Of Data

For data to be considered appropriate, at least:

- the data are suitable for the purposes of calculating technical provisions;
- there is no undue estimation error arising from the amount or nature of the data;
- the data are consistent with the methods and assumptions used to calculate the provisions; and
- the data appropriately reflect the underlying risks.

Completeness Of Data

For data to be considered complete, at least:

- the data are of sufficient granularity and include sufficient information to identify trends and assess the characteristics of the underlying risk;
- there are data available for each homogeneous risk group in the calculation; and
- no relevant data are excluded from use in the calculation without justification.



Accuracy Of Data

For data to be considered accurate, at least:

- the data are free from material errors;
- data from different time periods used for the same estimation are consistent;
- the recording of the data is consistent over time, and performed in a timely manner.