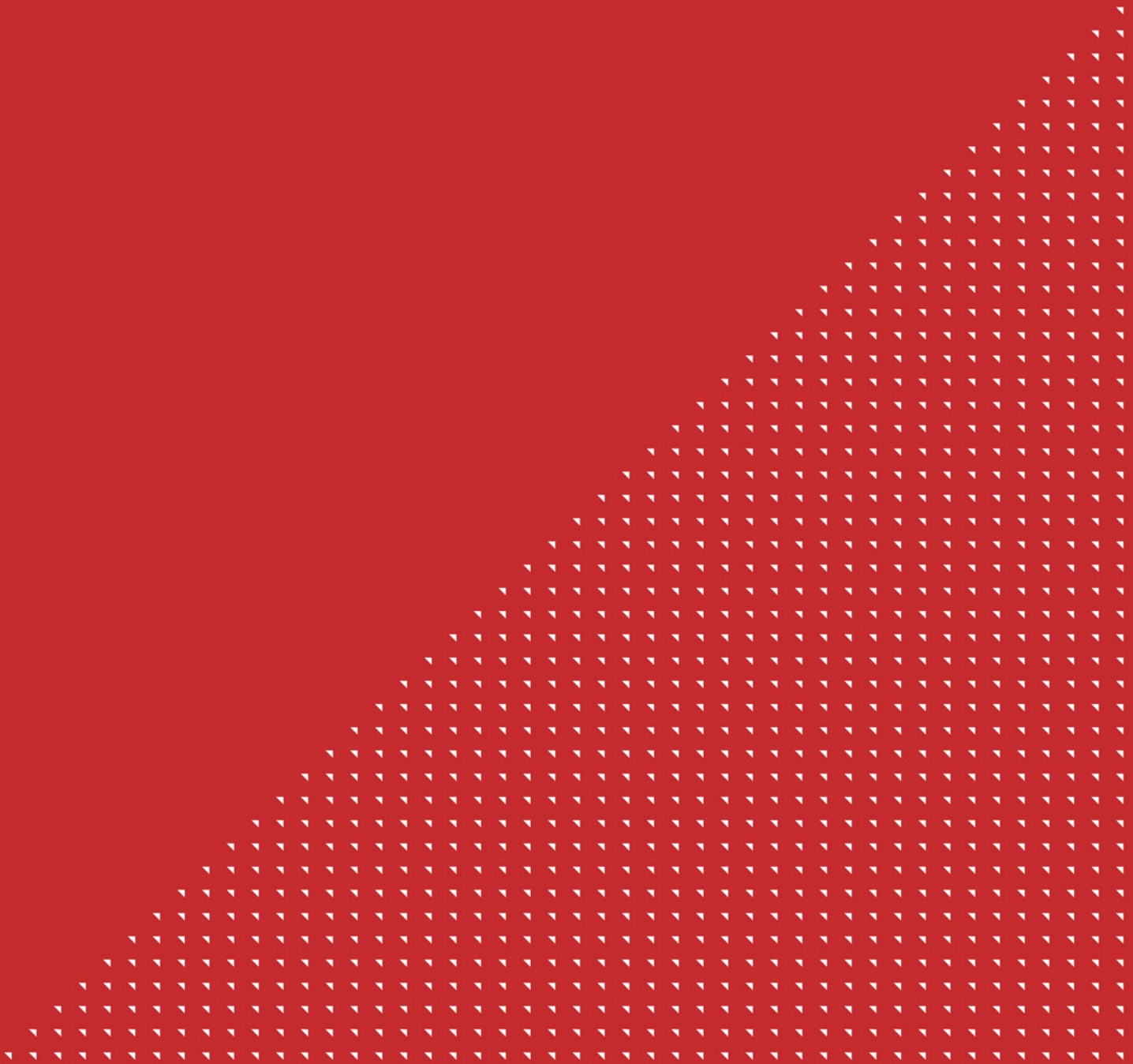


# Glossary



## Glossary

**Absolute return:** The ‘absolute return’ is the ‘actual return’. It is the rate of return on money invested, usually expressed as a percentage.

**Active management:** An approach to managing investments that aims to achieve returns above a set benchmark. Decisions about asset allocation and stock selection within the portfolio are reviewed regularly, taking into account market conditions.

**Active return:** The difference between the return achieved by the investment manager and the return achieved by the market movements of the assets included in the fund’s benchmark.

**Alpha:** The rate of return (ROR) earned by a security or a portfolio in excess of or below the ROR of the benchmark for that security or portfolio. A positive alpha means the investment outperformed the benchmark ROR. A negative alpha indicates that the investment underperformed the benchmark ROR.

**Asset allocation:** The distribution of investments by an investment manager among various asset classes or sectors (the major asset classes are shares, property, fixed interest and cash). Asset allocation may be referred to as ‘strategic’ or ‘neutral’ (where the asset mix is appropriate to the long-term liabilities of the fund) or ‘tactical’ (where the asset allocation reflects the manager’s view of likely short-term market movements). Also see ‘Dynamic asset allocation’.

**Benchmark:** A standard used for comparison. For example, the S&P/ASX 200 Accumulation Index is a benchmark that measures the price movement of selected companies listed on the Australian Stock Exchange. For those interested in monitoring investment performance, benchmarks are used as a measure for comparing a portfolio’s return against a similar portfolio of securities.

**Beta:** A measure of how the return of a security or portfolio fluctuates with the market. The market has a beta of 1. Therefore, you would expect the returns of a security (or portfolio) with a beta of 1.2 to be around 20% more volatile than the market. That is, if the market rises by 1%, the security may rise by 1.2%. Conversely, if the market falls by 1%, the security may fall by 1.2%. Similarly, you would expect the returns of a security (or portfolio) with a beta of 0.5 to be half as volatile as the market.

**Bond:** A fixed-term security, usually issued by government or semi-government authorities, that pays a fixed rate of interest during its life and repays the principal at maturity.

**Correlation:** See ‘Covariance’. Correlation is the covariance of the variables divided by the product of their standard deviations. It is the standardised measure of covariance, expressed as a unitless number ranging from -1 to +1.

**Counterparty risk:** The risk that parties to a contract (counterparties) will fail to honour their obligations under the contract.

**Covariance:** A statistical measure that calculates how two variables change together.

**Custodian:** A separate entity that holds assets on behalf of trustees. The custodian has the title to the fund’s assets, but the power of investment management remains with the trustees. A custodian provides administrative efficiency. QIC uses a number of custodians.

**Derivatives:** Financial instruments, such as futures and options, whose value is derived from underlying physical assets. Funds use derivative instruments:

- to offset the risk of price variations of securities
- as an alternative to purchasing/selling the physical security
- to benefit from any opportunities for profit that may exist in the market from time to time

- to manage currency risk and asset allocation.

**Diversification:** Investing in a variety of assets or through a number of managers to spread the risk. In popular terms, diversification means ‘not having all your eggs in one basket’.

**Dynamic Asset Allocation:** A systematic risk management and asset allocation framework that allows for real time changes to asset allocation weights, within pre-defined ranges, as risks and expected returns change.

**Endowment-style fund:** An investment fund that follows the investment philosophy of leading university endowments and foundations. The funds have an indefinite time horizon and regular cashflow requirements for funding commitments. The investment strategies are generally non-traditional and vary in approach, typically investing in absolute return and alternative strategies with a long-term perspective.

**Equities:** Also referred to as ‘shares’. Investments in Australian and/or international companies that represent an ownership stake, or share, of a particular company. Generally, these securities are listed on stock exchanges for those who buy and sell equities. While equities are often more volatile in their returns than fixed interest and cash investments, they also tend to experience higher returns in the long term.

**Equity risk premia:** The amount of return above a risk-free asset (i.e. cash) that is expected for taking on the risk of equities.

**Ex-post:** ‘After the fact’. A term used in financial forecasting models when uncertainty that existed before making an investment decision is resolved during the course of events. Ex-post results are calculated after the uncertainty has been resolved.

**Fixed interest:** One of the four major asset classes, fixed interest securities include bonds, bank bills, floating rate notes and negotiable certificates of deposit. Interest rates on these securities may be floating but are usually fixed. The holder is paid a fixed value on a fixed future date. Predetermined interest payments may also be made throughout the life of the security.

**Fund:** A trust individually constituted under, or governed by, the Trust Deed.

**Fund manager:** Also known as an ‘investment manager’. Invests and manages the assets of others.

**Global equity risk premia:** See ‘Equity risk premia’.

**Hedging:** An investment made to reduce the risk of adverse price movements in a security by taking an offsetting position in a related security, such as an option or futures contract.

**Illiquidity:** The inability to convert a non-cash investment into cash in a relatively short period.

**Implemented management:** Managing investments by allocating them to selected managers who are experts in particular markets. Implemented management involves careful selection and monitoring of the managers to ensure funds meet their investment objectives.

**Investment horizon/investment timeframe:** The total length of time that an investor expects to hold a security or portfolio (e.g. six months, one year, ten years).

**Investment manager:** See ‘Fund manager’.

**Investment Scorecard:** A proprietary QIC-developed framework used in measuring and managing client objectives.

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**Liquidity:** The liquidity of an asset relates to how quickly it can be converted to cash.

**Long short:** A portfolio construction model that can hold a negative (short) position in a stock as well as an overweight/underweight position.

**Non-cap weighted:** Index-weighting methodologies that do not follow the traditional market capitalisation weighting in the construction of their benchmarks (i.e. indexes).

**Outperformance:** Financial jargon for fund performance above the benchmark or above the targeted return. Its opposite is underperformance.

**Overweight:** Refers to a greater proportion than that included in the benchmark. Its opposite is 'underweight', which refers to a lesser proportion than that included in the benchmark.

**Portfolio:** Combined holding of more than one stock, bond, commodity, cash equivalent, or other asset by an individual or institutional investor. Refers to the mix of assets held for a single product/client.

**Rebalancing:** The adjustment of a portfolio over time to better reflect its underlying strategy.

**Risk premia:** The amount of return above a risk-free asset (i.e. cash) that is expected by accepting the risk of the investment. See 'Equity risk premia'.

**SCI:** Statement of Corporate Intent. An annual performance agreement between QIC and our shareholding Ministers.

**Stocks:** Individual securities within a portfolio.

**Underweight:** See 'Overweight'.

**Unit pricing:** A daily process of assigning a value to the units within a managed fund. The value of a unit reflects the value of the underlying assets in the fund.

**Wholesale market:** The larger of the two investment markets (the other being the retail market). The wholesale market involves large investments by institutions such as companies and superannuation funds.

## Explanation and examples

### Derivatives

Derivatives are instruments, such as options and futures contracts, which derive their value from the value of an underlying security, group of securities or an index. They can be an efficient alternative to buying and selling the physical assets, derivatives can be used where the underlying asset is not owned by the party to the contract. In these circumstances, the Fund is said to be using derivatives to leverage – i.e. to generate an exposure to assets that is greater than the capital invested.

#### Example

A 10 year Australian bond *future* generates an exposure of \$100,000 but in purchasing this futures contract only a small amount of capital outlay is required, let's say \$10,000.

If the value of the underlying asset of this derivative, in this case the 10 year Australian Bond, rose by 1%, the value of the derivative contract would now be worth \$101,000 and if sold, a gain of 10% on capital invested would be generated. However if the underlying value of the asset fell by 1%, a 10% loss on capital invested would be realised.

### Hedging

Hedging involves an investment being made in order to reduce the risk of adverse price movements in a security. This is usually done by taking an offsetting position in a related security, such as an option or futures contract

#### Example

Say the Australian dollar (A\$) is worth 0.70 US dollars (US\$). At this conversion rate A\$100 would buy a US\$70 investment. If the A\$ strengthened against the US\$, such that it was now worth US\$0.75, the initial A\$100 investment would now be worth approximately A\$93. If the investment was sold, this currency movement would result in a loss of nearly 7%.

To protect against this currency exposure when acquiring assets valued in foreign currencies, a hedge - in its simplest form a currency swap, foreign exchange futures contract, or foreign exchange option – could be put into place whereby we would hold the equivalent of A\$100 with a corresponding commitment to repay US\$70. In the above example, because of the increased value of the Australian dollar, we now require only A\$93 to repay our US\$70 commitment – a profit of 7%. Currency loss is offset by gains from the hedge.

The hedge has the effect of protecting the value of the overseas investment against currency fluctuations. On the other hand, if the A\$ fell against the US\$ to US\$0.65 then profits from the fall in the currency would be offset by losses with the hedge.

This is a simplified explanation - In reality the portfolio may have a basket of currencies and a variety of instruments which are applied to offset the currency risk.

## Modified duration

Fixed interest securities are purchased with a maturity date, that is, a date on which the capital is repaid.

The modified duration of a fixed interest investment is roughly equal to the average of the time until receipt of the investment's cash flows (weighted by amount). It takes into account any coupon payments as well as the final capital payment at maturity. For small interest rate changes, the modified duration is the approximate percentage change in price (or market value of the investment) for a 1% change in interest rates. To control interest rate risk within the Funds, QIC ensures that the Funds' investments are managed within strictly controlled modified duration limits.

### Example

A 10 year bond with a modified duration of 6 years would fall approximately 6% in value if the interest rate increased by 1%. The value of a bond with a modified duration of 1 year, would only fall 1% with a 1% increase in interest rates. Therefore, typically the longer the modified duration, the greater the sensitivity of that security to interest rate changes.

## Net leverage

When calculating the net leverage position, short positions are netted off against long positions (long exposures minus short exposures). If the maximum net leverage that the Fund could use was four times the Capital Value of the Fund, this would equate to a net long or net short cash position of 400%. If we were to assume the Fund had a Capital Value of \$10m, the maximum leverage would be \$40m.

### Example

Say the portfolio has a net asset value of \$1m, the notional exposure achieved when all of the long and short positions are added together can be up to \$15m (gross leverage limit). When calculating the net leverage position, short positions are netted off against long positions (meaning that long exposures minus short exposures could equal up to \$3m under the scenario above).

## Risk

Investment returns are volatile, deviating from the target return year on year, this is the inherent risk in investing.

There will be years when performance is above the return objective and years when it is below this objective and possibly the benchmark. The degree to which actual short-term returns deviate from the return objective (including negative returns and resultant loss of capital), provides an indication of the level of risk that an investor is taking.

## Risk (cont'd)

Typically, the greater the volatility, the riskier the investment – that is, the greater the risk that returns will not meet expectations and/or that the investment will realise a capital loss. This is the downside of taking risk. The upside is, of course, the potential for additional returns.

It is important, when assessing an investment's performance objective, to understand what level of risk the fund manager is taking or is willing to take to achieve that objective, as this will provide investors with an indication of the volatility of returns that they can expect from the investment.

### Example

Say we invest \$100 in a one-year bond yielding 5% interest. If we hold the bond for a full year, we will be paid back the initial \$100 invested, plus \$5 interest (5%). That is, if we hold the bond to its maturity, there is no interest rate risk.

If however we wish to sell the bond part way through the year, there is the risk that interest rates have risen and we will realise a loss on the sale of the bond. Let's assume that prices change and the yield on comparable bonds is now 7%. A buyer is unlikely to pay \$100 for our bond to earn 5% when they could achieve 7% buying a similar bond from someone else. Therefore we must sell the bond at a discount (and lose money). The sale price would allow the buyer to earn roughly 7% if he or she holds it until it matures.

Conversely, if interest rates had fallen, we could have sold the bond at a premium and increased our return.

## Tracking Error

Tracking Error is a measure of the extent to which a fund's return may deviate from its benchmark index based on the historical analysis of the funds volatility versus the market. The risk limits for each Fund guide QIC on how to manage the inherent risks of the Fund. Take for example a fund with an average ex-ante tracking error of 3% p.a.

QIC would manage such a fund's risks so you could expect the volatility of returns to be within 3% p.a. (ex-ante tracking error) around the targeted annual active return objective. If a fund had an objective of achieving returns of 1% p.a. above the benchmark, this means that 67% of actual returns would be expected to be between 2% p.a. below and 4% p.a. above the Fund's benchmark return.

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