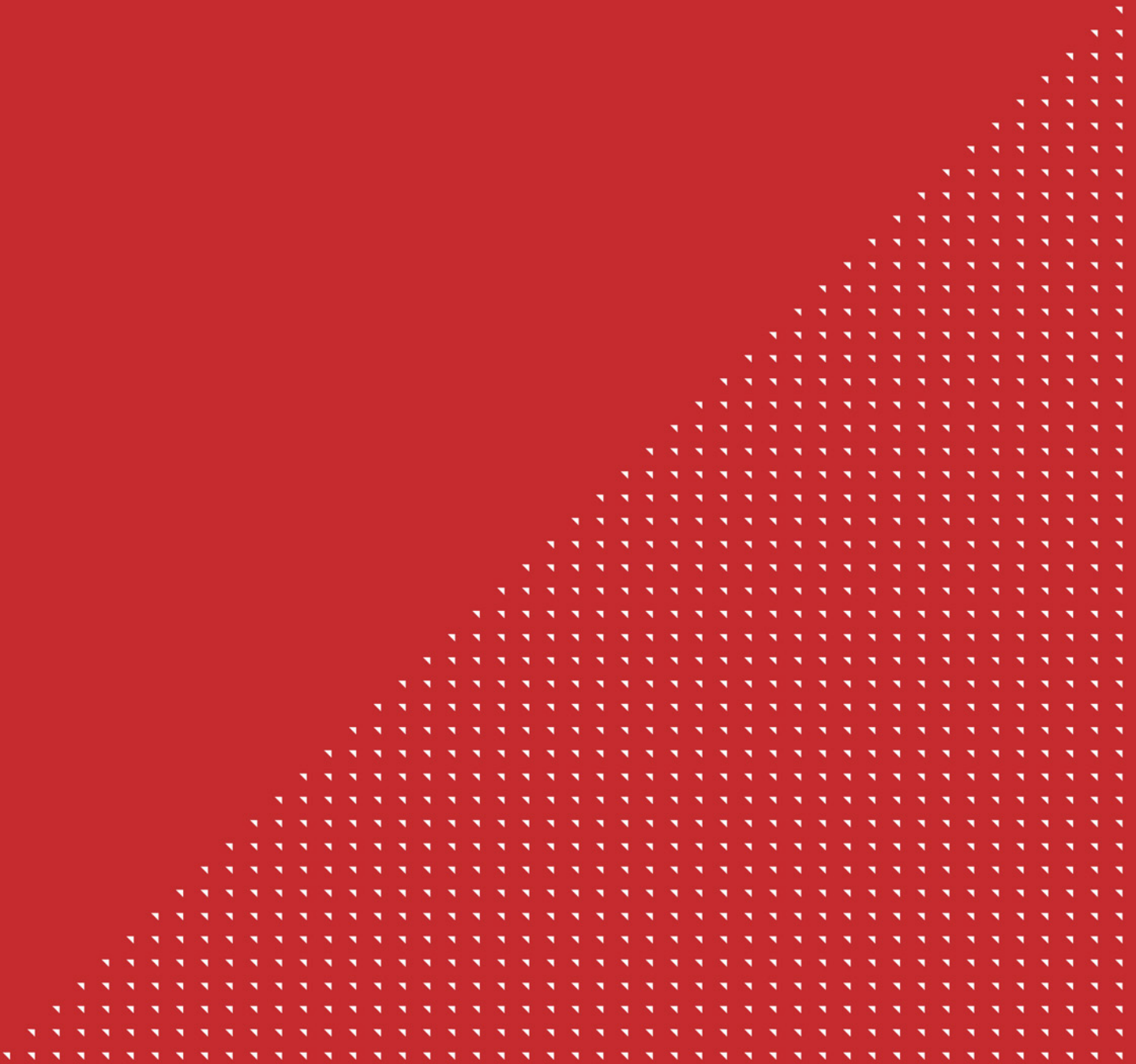


**Red Paper - Effective inflation
protection**
How it could work in your portfolio

May 2008



Snapshot

- A number of potential dark 'inflation' clouds have appeared on the horizon that could erode investment returns
- Inflation protection can provide additional diversification and hedge against inflation spikes
- Difficulty in accessing Australian inflation linked bonds has restricted effective implementation of inflation protection
- Synthetic securities provide a more flexible and tailored inflation protection solution
- Using synthetic securities is very capital efficient – it frees-up a funds cash to invest in other alpha-seeking or beta opportunities
- Already providing inflation protection to clients, QIC has developed extensive capabilities in providing inflation protection in a cost effective, capital efficient manner.
- Strong risk management systems including the use of BlackRock Solutions systems, enable QIC to fully understand the risk profiles from synthetic exposures at any point of time.

Effective Inflation Protection

Background

Sharp rises or spikes in inflation have the potential to significantly erode investment returns, and for defined benefit schemes inflation can result in growth of liabilities without a corresponding rise in assets. This paper discusses the benefits of building an exposure to inflation linked assets to create protection against inflation within investment portfolios.

While both global and domestic inflation is currently at historical lows there are real risks of inflationary spikes and potentially sustained higher inflation.

During the 1990s we experienced a sustained decline in global inflation, as Central Banks aggressively sought to attain their monetary policy targets. Globalisation also seems to have placed an important downward pressure on prices, along with strong productivity growth particularly in the US. As we settle into the new century, a number of dark 'inflation' clouds have appeared on the horizon.

After five years of above trend economic growth, along with strong population growth, supply of a number of commodities has failed to keep up with growing demand. We see this clearly in food, oil and other commodities. On the demand side, China's incredible growth has been a major factor, and with inflation having recently reached 8.5% pa, China no longer seems to be a dis-inflationary force. Geopolitical issues in oil have further constrained supply, and the search for alternative fuel sources has further pushed up prices of various agricultural products. The combination of these factors signals that the outlook for inflation over the coming decade may not be as benign as that experienced over the past 10 years.

How does inflation impact investment returns?

While the structural fall in inflation and interest rates over the past two decades has benefited investors, we have seen long periods in history where inflation has eroded the real value of investors' assets. For example, the global inflation shock of the 1970's significantly impacted economic growth and returns on assets.

The following table illustrates the impact of a sharp rise in inflation on asset class returns.

	Sharp Rise in Inflation
Gov. Bonds	▼
Corp. HY and EM Bonds	▼
Long Duration Bonds	▼
Listed Equity	▼
Listed Equity – Value & Growth	▼
Private Equity	▼
Direct property	▼
Listed Property	▼
Commodities	▲
Inflation Linked Bonds	–
Inflation Swaps	▲

Positive return impact ▲ Negative return impact ▼

Many investors have previously believed that equities represent a hedge against inflation. More recent research has disproved this theory.

- traditional assets such as bonds, equities and property are negatively correlated with inflation spikes
- inflation swaps and commodities provide the best hedge against inflation spikes.

For an accumulation fund, a targeted exposure to inflation protection can provide additional diversification and a reasonable hedge against inflation spikes. While for a defined benefit fund, inflation exposure provides significant benefits as a hedge against the fund's inflation linked liabilities.

How is inflation protection implemented?

Traditional Approach

While the benefits of exposure to inflation protection are well accepted, the difficulty in accessing Australian inflation linked bonds has restricted its effective implementation.

The traditional approach for hedging inflation risk, using inflation linked bonds, provides investors with an income stream linked to inflation outcomes. Sovereign governments and corporates issue inflation linked

securities as a way of diversifying their financing source and provide instruments for investors to hedge their inflation exposure.

One of the main drawbacks to inflation protection via physical assets is only being able to achieve targeted exposure to the extent that inflation linked bonds have been issued. For example, in Australia there are only three sovereign inflation linked bonds with maturities at 2010, 2015 and 2020. For investors wishing to hedge inflation past 2020 (without incurring credit risk), synthetic securities provide a more flexible and tailored solution.

An additional drawback of physical securities is that they require a 100% capital allocation to achieve the desired exposure. As such, the only way to increase the exposure is through an increased capital allocation or buying longer dated securities which increases both the interest rate risk and inflation exposure.

QIC's approach

Synthetic securities provide a more flexible and tailored solution to meet the needs of the investor. A solution to hedge out inflation risk is through the use of derivatives called 'inflation swaps'. These over-the-counter (OTC) securities are customised securities that provide the flexibility to allow particular exposures to be hedged more effectively and allow capital exposures to be managed independently. Typically, a physical exposure requires an equivalent amount of cash to be invested in the underlying security. Derivatives differ in that it is the mark-to-market value (current profit/loss situation based on market values) of the underlying position that needs to be backed, freeing up considerable cash. This frees-up a fund's cash to invest in other alpha-seeking or beta opportunities, while maintaining the required amount of inflation hedging on the portfolio - very capital efficient.

One additional challenge in obtaining an appropriate hedge over inflationary risks is a lack of supply of inflation linked products, particularly in Australia. Typically, inflation buyers have tended to be pension funds, seeking to hedge inflation risks on their defined benefit liabilities. On the other side of the inflation market, typically the biggest issuers (or sellers) of inflation linked products have been the government (in countries such as Australia, where an inflation-linked bond market exists), and utility-type borrowers, seeking to lock in real revenue streams on long term projects. In Australia, the market is quite small, and fairly illiquid.

As a result, we have taken advantage of infrastructure issuance as it arises and taken a more global approach to our inflation hedging requirements. Globalisation has led inflation to become highly inter-related between economies. In fact the correlation between CPI in Australia and that of the OECD (excluding high-inflation countries) remains extremely high since the early 1970s. Taking a global portfolio-hedge approach enables us to obtain a large part of our exposure in more liquid and better developed markets.

Track record delivery – QIC is a major player in the inflation market.

QIC has developed extensive capabilities in providing inflation protection in a cost effective, capital efficient manner. Already providing inflation protection to clients in this innovative way, QIC is a major investor in global inflation linked products. It has access to the major global counterparties in this market and has become a first point of call for potential issuers in the Australian inflation linked market. By working with our clients and counterparties, QIC has helped develop the Australian inflation linked swap market.

The advantages QIC offers for inflation management are:

- Experience in managing large global and Australian inflation linked portfolios
- Dedicated inflation specialists
- Strong track record in fixed interest alpha generation
- Diversification of counterparty risk and strong collateral management processes through use of ISDA's and Credit Support Annexures (CSA's)

- Strong risk management systems through the use of BlackRock Solutions systems to enable detailed understanding of risk profiles from synthetic exposures
- Strong local and global counterparty relationships to provide access to deal flow
- Relationships where we are able to articulate our requirements on price and volume so supply can be found

For further information on how you can protect your portfolio from inflation please contact

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Like to see a Red Paper on a particular topic or issue?

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