The Impact of Inflation on Pension Funds

Over the last decade and a half following the 2008/09 economic crisis, global inflation has been systematically low, trending below 3% for most of the period. During this time, investors have enjoyed an extended period of relatively high real returns across most asset classes. However, the tide is turning, and inflation continues to spike globally as a result of fresh rounds of both fiscal and monetary policy measures implemented in the wake of the COVID-19 pandemic. Pension funds, therefore, ought to pay more attention to inflation and its potential ramifications on their portfolio performance.

Inflation, particularly an unexpected and/or persistent rise in inflation, can have an adverse impact on pension funds and their investment performance. Simply put, inflation is the general increase in the cost of goods and services, measured over time by the Consumer Price Index (CPI) which is a specific 'basket' of goods and services that is representative of consumer spending habits. A reported inflation figure is, therefore, an indication of the level of change in the cost of goods and services over time. It is caused by a combination of increasing production costs (cost-push) and rising demand for goods and services (demand-pull).

As the cost of goods and services increases, the purchasing power of money is eroded and thus, what one could purchase with one hundred Pula 20 years back is significantly more than what one hundred Pula can get you today.

The Organisation for Economic Co-operation and Development (OECD) notes that the overriding objective of a pension fund is to "serve as a secure source of funds for retirement benefits". Therefore, pension funds should set return objectives that account for the erosion in the value of money over time when provisioning for retirement benefits to members. The value of the contributions made by an employee and/or their employer towards their pension plan is susceptible to the effects of inflation. To demonstrate this, assuming a person saves P100,000.00 in an account earning a zero return (no growth) today, the same would be worth in today's terms only about P85,900.00 in 5 years, P73,700.00 in 10 years and P54,400.00 in 20 years based on a hypothetical constant inflation rate of 3.0% over the periods. This demonstrates the cumulative extent of the erosion of purchasing power on pension contributions over time.

However, in practice, the contributions made towards an individual's pension fund are invested across different asset classes according to the fund's risk tolerance and earn an investment return. This investment return too is not immune to the effects of inflation. Assuming the same

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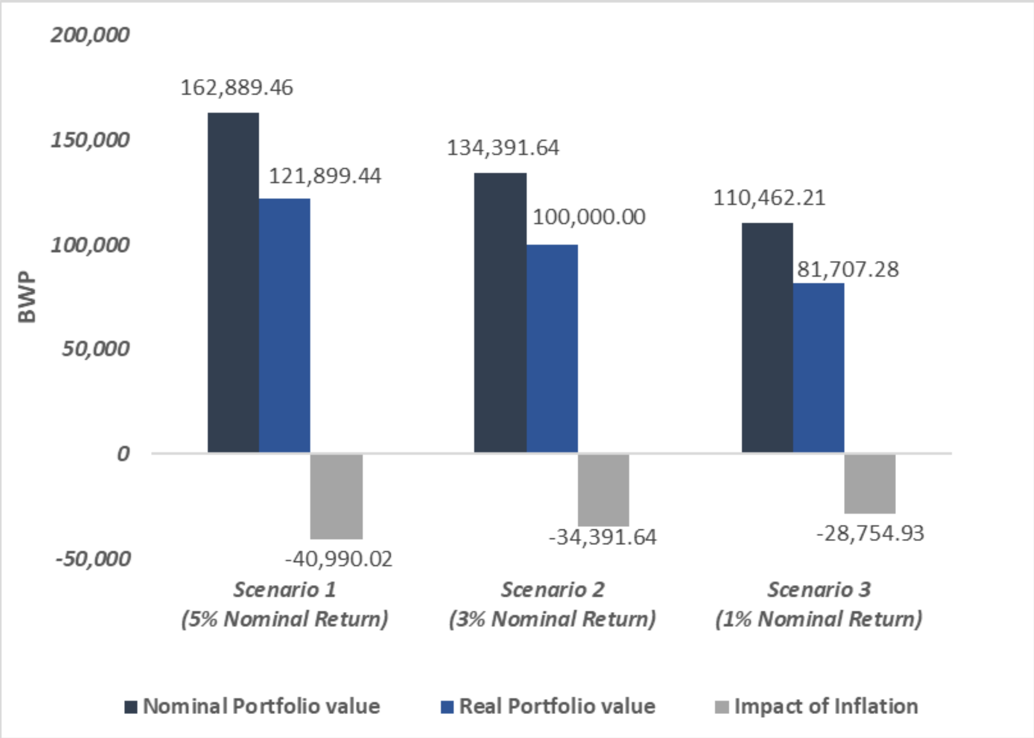
P100,000.00 once-off contribution from earlier is made into a pension fund, invested over a period of 10 years and a constant inflation rate of 3.0% over that horizon, we observe the following three hypothetical scenarios.



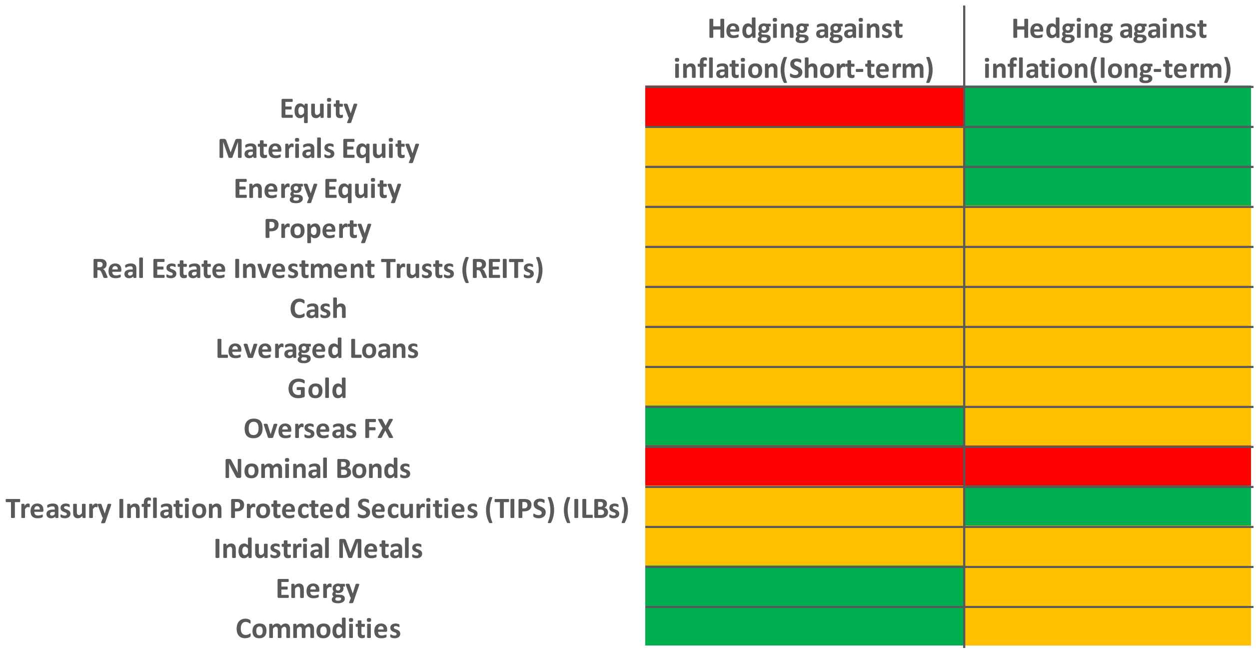
- **Scenario 1:** If the portfolio's investments had an annual return of 5.0%, over the 10 years, before accounting for inflation, the value of the portfolio would have grown to an absolute amount of P162,900.00. However, accounting for inflation at 3.0%, the purchasing power of the portfolio would have declined by 3.0% over the same period. Thus the pension fund, in real terms, would be worth P121,900.00, having earned a real return of 2.0% over the period.
- **Scenario 2:** If the portfolio's investments had an annual return of 3.0% in nominal terms over 10 years, the value of the portfolio would have grown to an absolute amount of P132,400.00 over the 10 years. Again, accounting for inflation at 3%, the purchasing power of the portfolio would have declined by 3%. Thus, the real return of the fund would be 0% over the 10 years, resulting in a real ending value of P100,000.00 with no real value realized.
- **Scenario 3**: In a worst-case scenario, if the portfolio's nominal return is less than the 3% average inflation over the 10 years, the pension fund would be worse-off in real terms as the increase in the cost of goods and services would have outpaced the growth of the fund over the investment horizon. With a nominal return of 1.0% in the third scenario, the portfolio value would have grown to an absolute P 110,500.00 in 10 years; however, its real value would only be P81,700.00.

That is inflation at play! Although it varies from one asset class to another, generally, higher inflation results in lower/weaker real pension returns and investment growth. To manage this, when drafting a pension fund's Investment Policy Statement (IPS), through their asset consultants, pension funds generally define pension plan return targets in real terms to protect against the erosion of value and achieve real growth. This is done with due consideration of the beneficiary objectives and constraints. Therefore, asset managers tend to forecast inflation and manage inflationary risk when making investment decisions by selecting investments that are likely to offer positive real returns based on their inflation estimations. That said, inflation can be difficult to predict as various factors such as the ongoing global pandemic can alter the path of inflation drastically, leading to a significant deviation from market consensus (on inflation).

The question one would ask then is 'How does one go about minimising the effect of an unexpected/persistent rise in inflation on their pension fund?'. In addition to factoring in an inflation forecast in the investment decision process, there are a number of options at the disposal of investors to help reduce the impact of inflation on their portfolios. The simplest of which would be to diversify a (pension fund) by investing a portion of it in assets with a natural hedge against inflation like commodities (such as gold and other precious metals), variable rate bonds, real assets and appreciation-oriented assets. The use of derivatives can also prove worthwhile, though it may come at a cost due to the complicated nature of such transactions and may be restricted or not permitted by some pension funds. Investors and pension funds alike can also incorporate a real return objective in their funds. Empirical evidence indicates that in the long run equities have a high inflation hedging ability thus investors with a long horizon can ride the wave and earn positive real returns without the need to hedge.

An allocation to inflation-linked bonds (ILBs) also helps in cushioning against inflation as the principal grows with inflation and thus retains its purchasing power. The absence of this asset class locally presents lost opportunities, and Bifm has been at the forefront of lobbying the central bank to consider the issuance of ILBs locally.

The chart below summarizes the inflation hedging qualities of a select set of assets over the long and short term.



Adapted from: Schroders Investment Perspectives; What are the inflation-beating asset classes?

- **Green =** Good inflation hedge in the horizon
- **Orange =** Average inflation hedge in the horizon
- **Red =** Poor inflation hedge in the horizon

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