

cardaknows

Navigating the crisis – A case study in Solvency Management

August 2011

The current stress in markets raises many questions. Is a replay of the 2008/09 crash and recession likely? What should pension funds be doing in their portfolios? At Cardano we provide advisory services to trustees and also manage pension funds under a form of fiduciary management we call Solvency Management. Solvency Management is the full time management of the assets relative to the liabilities and our approach is to build all-weather portfolios focussing on delivering a stable growth in the funding ratio. Recent market conditions provide a good case study into how Solvency Management can provide real benefit to Trustees being a safer way to invest.

Whilst we have taken a number of steps with our advisory clients this year, in this Cardaknows we focus on the recent actions we have taken on our delegated clients' behalf and our plans for the future.

What's going on?

We think there are three important forces at work:

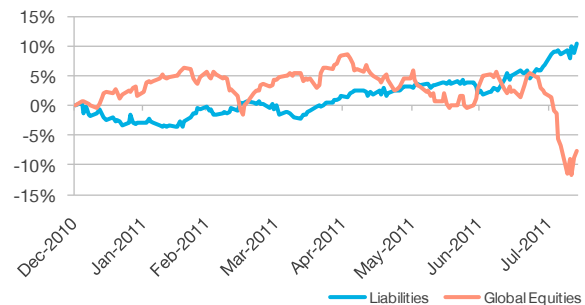
- Economic slowdown – over the last couple of months, there has been considerable evidence of many economies slowing more than expected. This is certainly true of the UK, but more significantly (for markets) the US and China as well. Had this been the only development, it would, in itself, have warranted equity falls and rallying bond markets
- Fears of contagion in European sovereigns – the market has been well aware of problems facing Portugal, Ireland and Greece for some time. However over the last few weeks, questions of contagion spreading to Italy and Spain have arisen. Unfortunately fears of a default can become self-fulfilling. If borrowing costs rise dramatically then otherwise solvent countries could see their debt spiral out of control, raising the likelihood of a default. Such an outcome would have a catastrophic impact on Western economies and cause a major recession. The market believes the probability of a default by a sovereign European state (other than Greece) has risen in recent weeks
- Last minute resolution of the US debt ceiling and S&P's downgrade of US government debt – has so far been irrelevant. However attention on the fiscal credibility of the US means that if Western economies do go into recession, fiscal policy (i.e. spending and tax cuts) will no longer be available as a tool for stimulus. It will be entirely up to central banks to stimulate the economy and provide liquidity

What has been the impact on markets?

Equity markets fell significantly in the first week of August. For the year to 12 August, equities are generally down 10% to 20%.

Less well publicised has been the movement in bond yields and the associated impact this has had on pension scheme liabilities. Real yields on index-linked gilts are now negative for the first 10 years and long-dated index-linked gilt yields are below 0.5%. Overall we estimate that pension scheme liabilities have increased by c. 10% in the year to 12 August.

Equities vs Liabilities



This clearly doesn't bode well for funds that rely on equity outperformance and rising bond yields. For the year to 12 August, equities have underperformed liabilities by c. 20%.

What have we been doing?

Our objective in our delegated mandates is to outperform the liabilities (typically by 2% to 3% p.a. net of fees) without any major adverse shocks and without being overly reliant on one economic scenario developing. We call this 'all weather' investing. It isn't acceptable for us to underperform the liabilities by anything close to 20% within a year. We assess the impact of different economic scenarios and then build portfolios ensuring they are robust against changing conditions. We start from a position of preserving the funding ratio and only take risk where we think it will be rewarded. Our approach means that we seek to protect the funding level in adverse scenarios and accept that we will do less well in a strong equity market.

The first and most important means of defence during a crisis is to be prepared – it is very difficult to create and put into place a plan once a crisis has started. There are a number of ways in which we were prepared for this crisis, some of which are structural and some of which are tactical.

From a structural perspective:

- We always keep the level of liability hedging within the 80% to 100% range. This way we never expose our clients to significant interest rate or inflation risks

- Within the return seeking investments, we favour managers who are expected to reduce risk when they become less confident of the environment. Part of the portfolio is therefore naturally dynamic
- We ensure that the portfolio has protection strategies that are designed to pay off in times of market stress. We use options as well as uncorrelated funds

From a structural point of view, therefore, whilst we expect our portfolios to perform well under a central scenario, we also expect to experience only limited underperformance relative to liabilities during market stress. However, we will intervene where we think the risk in our portfolios is too high and we have taken a number of 'tactical' decisions this year to manage risk:

- From early this year we hedged 100% of the liability risk using swaps and other derivatives, which is our neutral starting point. We thought that the UK economy would be weak and that the BoE would have to keep base rates lower for longer, putting downward pressure on yields. This positioning has protected our clients extremely well against falling yields
- At the beginning of the year we were running at approximately 80% of our maximum risk level. We anticipated a 'mid-cycle' slowdown towards the middle of the year as we knew that fiscal stimulus and QE2 were due to expire around June. We planned to reduce risk modestly in Q2
- As Euro stresses built up we developed a European stress scenario – what would happen if things went severely wrong? How much could we lose? We worked through all of the c. 30 investments in our portfolio to determine a likely loss. We decided to impose a portfolio limit of c. 3.5%. i.e. we weren't willing to see our clients' solvency deteriorate by more than 3.5% if a European stress scenario developed

Our stress testing analysis (and discussions with the underlying managers) revealed that there was a little too much risk in the portfolios and therefore we would need to take action to reduce risk to our desired level – selling emerging market equities, doubling the investments in various tail risk protection strategies and reducing one or two manager positions. We executed these decisions from April onwards and completed our reorganisation by the end of July.

Between the actions we took and those taken by the individual managers, the risk in our portfolios reduced to c. 50% of our maximum risk level.

How have we done?

In the first 12 days of August, equity markets were down c. 10% to 15% and liabilities up c. 3.5%. Our portfolios were up around 2.5%, marginally behind the liabilities. Year to date, liabilities have appreciated by c. 10% and our delegated portfolios are up c. 11%. We estimate that a 50% equity, 50% LDI portfolio is c. 10% behind liabilities.

How will this end?

No one knows for sure. However it does seem to us that this isn't a new crisis, rather a continuation of the previous one. Private debt was effectively transferred to the public sector.

That has bought time, but governments need to regain fiscal credibility. The problem is that in some cases (e.g. Greece and Portugal) the debt mountain is too high and their economies are uncompetitive. Traditionally countries in this situation default, devalue their currency and then move forward. However, Greece and Portugal can't devalue within the Euro. Something major has to change – either a break up of the Euro or fiscal union. Both of these measures are extremely difficult politically.

Yet without a credible solution to the periphery, markets don't know where to draw the line, so will keep putting pressure on fundamentally solvent countries like Italy, Spain and France.

The most likely outcome is that risky assets remain very volatile and could fall quite materially. However our central expectation is that politicians will eventually produce a credible plan allowing an orderly default of the periphery and effective devaluation or fiscal union. Once such a plan is announced, markets will be able to draw a line between the periphery and core and much of the equity falls and bond rally could reverse. However the extent to which markets return to their previous values will depend a lot on the state of the underlying economy and whether we have entered a new recession.

However, there is a chance that politicians don't produce a convincing solution quick enough and we experience a 'disorderly default'. This could be a peripheral country actually defaulting, Italy/Spain failing a bond auction or the collapse of the banking sector in a European country. Such an event, without a credible Eurozone plan, could be catastrophic and the West would fall into a recession at least as severe as the post-Lehmans failure. However this time we would be lacking fiscal policy as a potential remedial tool.

Looking forward

As quickly as we and our managers derisked, we will be willing to add risk. There are many ways we can do this besides the obvious route of purchasing equities. We may choose to reduce the amount of liability hedging, or buy corporate bonds, high yield bonds, foreign currency, equities or other assets. For the moment though we are comfortable running a low level of risk in these very uncertain times.

Whatever we do will be measured and diversified and phased in through a number of small steps.

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