

Dynamic Risk Management

How can dynamic de-risking help us ride through stormy market conditions?

By Watson Wyatt Worldwide Thinking Ahead Group



20/20 Foresight?

Watson Wyatt's Thinking Ahead Group originally published this article back in May 2008, advocating that funds consider a more dynamic approach to managing risk in their portfolios. At that time, we were writing that you were still delighted with how fund performance had turned out. Over the 5-year period 2007, the assets were returning some 20% p.a., generating a significant surplus. The investment risks the trustees had taken over the last few years had paid off. However, the financial system was beginning to show signs of stress and we urged funds to consider whether it might make sense to take some risk off the table.

Did we have 20/20 foresight? We did write that there were serious challenges in the investment markets going forward. However, we doubted whether anyone truly foresaw the extent of this "financial tsunami". Critically, our original advice was not based on an ability to predict market movements!

So is our advice still relevant today? Absolutely! And what should you do now? Some of the data in our article has undoubtedly been overtaken by even more record-breaking statistics. Financial positions have changed and the eventual answer may be less clear, i.e. whether you should take risk off the table, or maintain, or increase risk. (Our original title was "Time to de-risk?") But our key point remains sound and even more relevant today, which is that many trustees can and should consider taking a more dynamic approach to strategy and risk management. Please read the article in that light as you consider: "What are you going to do now, and how will you make your decision?"

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We advocate that trustees should start with considering the current position relative to the journey plan, assessing the impact of the current risk level on the scheme, and consider whether this is appropriate. For those with sufficient governance budget, a dynamic approach to risk-taking can be considered.

"But wait a minute," you say. "I thought you said market timing is dangerous?"

Yes, it is. But there are ways to be dynamic without necessarily taking short-term views on the markets. One approach is a simple rebalancing strategy, not letting your assets "drift". Making sure that you frequently rebalance back to your strategic benchmark provides discipline is a first step towards being "dynamic" in that it involves actively trading back and forth between the asset classes in your portfolio. We believe that all funds should have a rebalancing program in place already at a minimum.

There is an opportunity to dynamically adjust your strategic benchmark by considering:

- Why we take risk—it is too expensive or unaffordable otherwise
- The journey plan—when do we win the game?
- A practical option—dynamic risk management

The impact of risk

Many Hong Kong funds have enjoyed spectacular equity returns in recent years. FTSE All World Index returned 19% p.a. over the period 2003 – 2007. The Hang Seng Index raced even further ahead returning 24% p.a. over the same period. This generated healthy surpluses for many funds.

However, market volatility and risk has increased recently to put it mildly. You've heard all that you ever wanted to hear about the sub-prime crisis that hit in July, August and November 2007. The US economy is arguably headed for recession or is already in one, depending on who you talk to. Not many people are holding their breath seriously thinking that Mr. Bush can rescue the

US economy. The Hang Seng Index had its worst downturn since 9/11 recently, losing almost 9% in a single day on 22 January 2008 and down around 20% for the first quarter of 2008.

All this comes at a time when many Hong Kong funds are maturing, and deficits are being amortized over shorter time horizons. As the salary roll of the active membership declines, the

“ Consider the game won when you have accumulated enough assets in your fund to meet the Total Reserve ”

impact of investment losses becomes much more significant. Consider a scheme with HK\$200 million of assets and a salary roll of HK\$20 million. A 1% investment loss resulting in a deficit requires some 3% increase in contributions over a three year period. This could be a significant burden for the sponsor during an economic downturn.

Questions for trustees to consider:

- How much risk is the scheme currently taking?
- How has this changed because of the recent market events?
- Can the scheme tolerate the current risk level?
- What could be done to capture and lock-in some of the gains?
- Do we do nothing, or is there something that could and should be done?

We believe that if you have the governance budget, then one option is to take a more dynamic approach to strategy implementation.

Why we take risk

One of our long-standing clients recently pointed me to a Financial Times review of a book called "Worry-free

Investing", by Zvie Brodie, a professor at Boston University, and Ian Sykes, a consulting actuary. This perhaps "subversive" book suggests that equities should not form the basis of most people's retirement savings.

"They are too risky, even over the long term, the book asserts. It gives short shrift to the conventional wisdom that the risk of holding equities decreases

over time, and to the idea that equities are more or less guaranteed to out-perform bonds over the longer term."
– *Financial Times, 7 Jan 2008.*

They may have a point that equities are risky. Unfortunately, the reality of course is that most companies cannot afford to fund their retirement schemes with a 100% bonds only investment strategy. Even if they can afford it, such wastage of opportunity is anathema to many Finance Directors and they would prefer to take some risk in the hope of reducing the cost. So whilst Zvie Brodie and Ian Sykes may very well be right, the practical answer is a bit more complex.

The journey plan – when do we win the game?

So we take risk because, otherwise, it may not be possible to reach our destination. But what is our destination? How do we win the game?

One way to frame the answer is to consider the game "won" when you have accumulated enough assets in your fund to meet the Total Reserve (as defined in the box). That is a tall order of course and few schemes would be considered 100% funded on that basis. Nevertheless this is the ultimate destination for all schemes and you have to know how

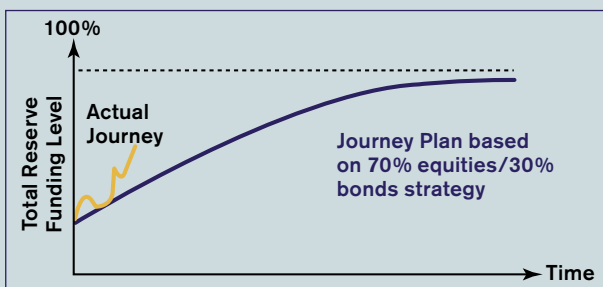
The total reserve and the journey plan

Total Reserve is defined as the value of all benefit payments, both current and future. Your destination is when the scheme has sufficient assets such that, even when these are invested in a risk-free way, those assets would be sufficient to pay off all current and future benefit payments without any further contributions being required. Let us call that the Total Reserve.

Schemes rely on investment returns and contributions to reach its destination. However, each scheme's journey will be different: each takes a different level of risk, and has different pace of funding. Hence each scheme will have a different Journey Plan.

Consider the chart below for a typical retirement scheme (Figure 1). The Total Reserve Funding Level on the left-hand axis should be interpreted as the percentage of the Total Reserve as we have just defined it.

Figure 1: Actual Journey



to get there, where you are at currently, and where you are headed.

For most funds, after the recent years of positive equity returns, they would be ahead in their journey plan. In this situation, maintaining the current strategy is likely to take you to your destination in a shorter time frame. On the other hand, if there is no rush in reaching the destination, then you can afford to take some risk off the table: this will take you to your destination in the same amount of time, but with more certainty.



If we ever find ourselves at the 100% line (see Figure 2) then we have “won the game” and can afford to take all risk off the table (or at least as much as practically possible).

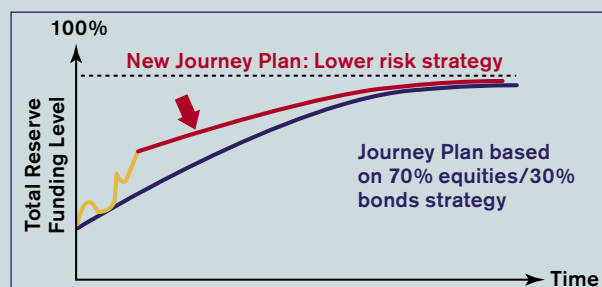
A practical option – Dynamic risk management

That is great in theory, but is this something that Asian retirement funds can actually implement in practice?

Yes. There are many ways you could actually implement such a dynamic strategy. As an example of how you might implement such a dynamic process, here is a basic checklist:

- Define your journey plan
- Agree on upside and downside trigger points and a consistent asset allocation at each level
- Identify the assets to be sold and purchased and establish mandates for managers so that they can accept instructions at short notice

Figure 2: New Journey



Maybe you have planned your journey based on a known level of contributions and a strategy of 70% growth assets. It might be that the actual journey has taken your fund 85% of the way to its destination earlier than expected. You are well ahead of the game.

So now, if you want to get to your destination in the same time frame, you might not need to take so much risk – and can afford to de-risk and move perhaps to a 50% equity allocation because you've moved up from the blue flight path, to the red flight path (see Figure 2). Notice that the great thing about this strategy is that you do not have to take short-term views on the markets. It works, because you have a clear objective.

- Establish a decision-making process (delegation, notification etc.)
- Establish a regular monitoring process (e.g. daily, web-based)
- Review annually or whenever the journey plan is reviewed

There is a caveat though, you must have appropriate Governance in place. In particular, you must have the ability to make quick and swift investment decisions for obvious reasons.

When I looked back in January, the well known “fear factor” or CBOE Volatility Index (“VIX”) was running at 29. This compared to a 52 week range at the time of 10 to 38. The VIX measures the implied volatility of S&P 500 index options. The higher it is, the higher the market's expectation of volatility over the next 30 days.

Since then, it has already come back down to around 20.

Has an opportunity already been missed or is it time to de-risk?