

A Deeper Look at Manulife

August 13, 2010



Shares of Manulife (MFC) have come under significant pressure over the past three years, culminating in a sharp decline earlier this month following the release of second quarter results. Manulife's problems started with decisions made during the height of the 2003-2007 equity bull market and were exacerbated by the subsequent market turmoil through 2008-2009.

Manulife's Acquisition of John Hancock

In September of 2003, Manulife announced that it would acquire John Hancock, a large U.S. life insurance company (deal completed in April of 2004). At the time, the deal was viewed positively by most, as Manulife's growth in Canada was likely to slow in the ensuing years, while Hancock would also give Manulife a foothold in the fast-growing emerging Asia market. For several years, the combined Manulife/Hancock business thrived, with strong growth in the U.S., Canada and Asia. However, much of the momentum that the company built up was driven by strong sales of variable annuities in the U.S. Hancock business.

A Quick Primer on Variable Annuities (VA)

Variable annuities (known as segregated funds in Canada) were introduced in the 1980s. In their earliest form, variable annuities essentially provided a guaranteed death benefit to the holder and variable returns based on the performance of an underlying equity market. For example, if the holder purchased a \$1 million VA and the value of the policy at death was worth less than \$1 million, the policy holder would still receive \$1 million. In this way, the policy holder could enjoy some of the upside of equity markets, while still having the peace of mind that the principal would remain intact. As the market evolved, new products were introduced that allowed for policy holders to lock in higher guarantees as the underlying equity market moved higher and variable annuities that matured after a set time period rather than upon death. The market crash of 2000-2002 soured the life insurance industry's view of some of these products, as they were forced to make good on many of the guarantees made in the mid to late 1990s.

GMABs and GMWBs

Despite the experience in 2000-2002, the first decade of the new millennia saw the rapid growth of two new types of products: Variable Annuities with so-called Guaranteed Minimum Accumulation Benefits (GMAB) and Guaranteed Minimum Withdrawal Benefits (GMWB). A GMAB essentially allows the holder to walk away from the contract after a set period of time (typically 10 years) with a guaranteed lump sum, regardless of how the underlying equity market has performed. A GMWB essentially provides the holder with a guaranteed annual payout after a set number of years has passed. For example, a \$1 million GMWB with a 5% payout might begin to pay a minimum (the guarantee) of \$50,000 beginning in year 10 and continuing for the next 20 years (or in some cases until death).

From the life insurance company (lifeco) perspective, the benefits of products such as GMABs and GMWBs were the longer-term nature of the payoffs. Since most would not begin paying out for at least 10 years and the purchaser would pay ongoing fees for this period, the lifeco had plenty of time to build up the value of the underlying assets. Based on historical returns for equity markets over long periods of time, the likelihood that the value of the policy would fall below the guaranteed amount was perceived as relatively low, which was best evidenced by the relatively small amounts of reserves that regulators required lifecos to post against the guarantees.

In 2006 and 2007, Manulife through its Hancock arm in the U.S. and its Manulife banner in Canada, was one of the biggest sellers of variable annuities, selling some \$20 billion in the U.S. and more than \$2 billion in Canada.

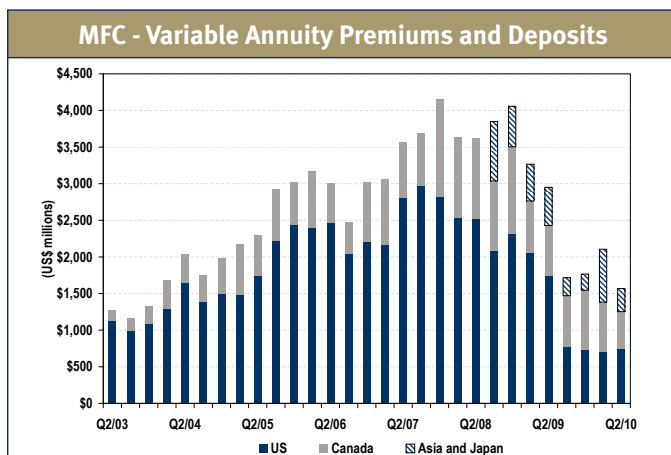
The Financial Crisis of 2008 and 2009

It seems clear that the life insurance industry, along with many others, did not see the coming storm of 2008 and 2009. The variable annuity products, which had been marketed aggressively by the lifecos over the period of 2003 to 2007 and especially in 2006 and 2007, relied on the assumption that long-term returns for the stock market would be positive. Lifecos had avenues to reduce the risk of a sharp market correction – by direct hedging with derivatives or reinsuring – but, for the most part, Manulife chose not to pursue these avenues. Essentially, a lifeco that chooses not to hedge its exposure was making a significant bet that the equity market would rise over time.

When the market fell sharply in 2008 and early 2009, many of the variable annuity products fell into deep deficit positions. Even though most of the guarantees would not kick in for many years (recall that most did not begin paying out for at least 10 years), regulations forced lifecos to greatly increase their reserves against the guarantees. Manulife, because it had opted not to hedge its exposure for the most part, was forced to repeatedly increase reserves, eventually raising more than \$4.6 billion of equity and reducing its dividend by half.

The Recovery of 2009

When equity markets bottomed in March of 2009 and began a steep recovery, the potential future losses faced by the lifecos on these guarantees began to decline. As the market rose, Manulife took the opportunity to begin hedging its exposure with the ultimate goal of reaching a hedge of 70% of its total exposure (currently near 50%). Unfortunately, hedging has become more costly in the aftermath of the financial crisis and thus while Manulife's actions lowered overall firm risk, it also placed a drag on a potential recovery. It is likely that most of the remaining exposure that Manulife has yet to hedge was originated near the peak of the market in 2006 and 2007 and thus would be prohibitively expensive to hedge absent a further significant rise in stock prices. It is worth noting that Manulife has reduced its new business origination in variable annuities, as the lessons of the past decade made it clear that it was a difficult product to price properly. Further, the company has taken steps to make new products less



risky to the company and is now hedging (mitigating the risk to the company of downward moves in the stock market) most new sales.

The Recovery and Interest Rates

The 80% rally in equity markets from March of 2009 to April of 2010 helped to reduce the potential future liability that Manulife and the other lifecos faced from their unhedged variable annuity exposures. However, markets still remained between 20% and 30% below the levels of 2006 and 2007, meaning that many of the products sold during these years were likely still in a significant loss position. At the same time that equity markets were rising, bond yields, which peaked at nearly 4% for the U.S. 10-year treasury in June of 2009, continued to decline.

Lifecos have complex balance sheets that are impacted in a variety of ways by changes in interest rates. For the most part, lifecos have liabilities in the form of annuities and life insurance policies that extend for a longer period of time than the assets that the lifecos own (largely government and corporate bonds). This mismatch means that when interest rates decline, lifecos are negatively impacted. Further, while the obligations that lifecos have to policyholders extend far into the future, because of regulatory and accounting rules, the lifecos are required to value these obligations as though they were all due at the present time. Because of the impact of what is referred to as “present value”, the lower the interest rate, the greater the obligation will be. Lastly, demand for life insurance products, especially annuities, tends to decline in a low interest rate environment, as the potential rates of return for policyholders is not enough to stoke demand. Thus, low rates are negative for lifeco balance sheets (because of the aforementioned mismatch) and their income statements (because demand and thus revenues are likely to suffer). The chart to the right highlights the close relationship of Manulife’s share price and the direction of long-term bond yields in the U.S. over the past half year.

Manulife at the Present Time

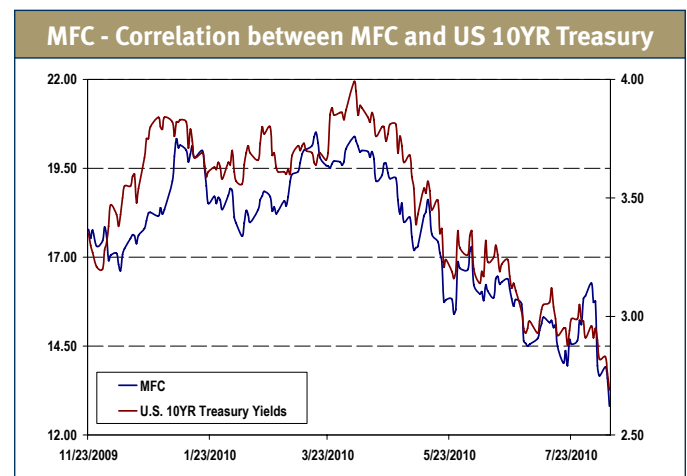
While the sharp rally in equity markets from March of 2009 to April of 2010 greatly benefited Manulife, the decline in interest rates reduced the positive impact. Further, while the company has gone a long way toward hedging its ultimate exposure to downward

moves in equity markets, these hedges have come at a cost, and it remains only about 50% hedged. When Manulife reported results earlier this month, it surprised investors with its continued sensitivity to both equity markets and interest rates. While the company has tried to provide guidance over the past couple of years related to its sensitivity to moves in equity markets and interest rates, this guidance has at times failed to capture the full magnitude of exposure that the company faces, as there are likely many moving parts that make it difficult to give a precise estimate. In addition, the company announced that it would likely take a series of charges in the upcoming quarter amounting to between \$1 and \$2 billion, as it goes through its assumptions related to long-term interest rates and various accounts on its balance sheet.

Against this backdrop, Manulife continues to have powerful franchises in Canada, the United States and Asia, which are generating strong sales performance in traditional life insurance and asset management products. While the company’s decision to de-emphasize variable annuities and the decline in demand because of low rates has hurt revenue and earnings, the company has still been able to generate strong revenues during much of the past two years.

A Return to Normalcy

Needless to say, a sharp rally in equity markets and a concurrent increase in interest rates would go a long way toward mitigating Manulife’s problems. While the company has taken steps to hedge its equity exposure, much of its remaining exposure is likely too costly



to hedge at the present time, although a continued market rally would potentially enable the company to reach its hedging goals. Below, we will look at three scenarios for equity markets and interest rates and how each would potentially impact Manulife.

■ **Scenario 1: Equity markets and interest rates**

resume a more normal path: Over the past century, it has been highly unusual for the equity market to experience a prolonged period of flat or even negative returns. Should we return to a more normal environment in which the equity market returns between 6-8% annually over a prolonged period of time, it is likely that many of the problems facing Manulife will begin to abate. Further, a return to a more normal environment would likely be accompanied by an increase in interest rates, which currently sit near historically low levels. Such an outcome would also be beneficial to the company.

■ **Scenario 2: Equity markets trade in a tight range and interest rates remain at or near current levels:**

While a steadying of the underlying environment would potentially help to mitigate the volatility in Manulife's business and potentially its share price, RBC Capital Markets estimates that flat equity markets and no change to the current level of interest rates would potentially place a negative strain on Manulife's earnings power of as much as \$0.15 per share per quarter, as it is forced to continue increasing reserves against future losses. Currently, Manulife generates approximately \$0.35 to \$0.40 of earnings per share on a quarterly basis and thus a drag of as much as \$0.15 per share would not be insignificant.

■ **Scenario 3: Equity markets and interest rates**

decline from current levels: A decline in equity markets and interest rates would potentially force Manulife to take significant reserves against future losses. This was best evidenced by Manulife's latest results, which followed a sharp decline in both equities and interest rates last quarter.

If one believes that scenario 1 from above can and is potentially even likely to play out, then a continued investment in Manulife could prove to be quite fruitful. However, one must weigh this investment versus the potential dangers of continued volatility in equity markets and the negative impact this could have on Manulife's business and its share price. Regardless, the past three years have demonstrated that an investment in Manulife and potentially even lifecos in general is a more complex and risky endeavour than many had previously thought. Investors that hold large positions should consider whether or not these risks have been properly accounted for within their portfolios and take appropriate measures where necessary.