Lancashire Holdings LTD

June 2014

I believe Lancashire Holdings is an attractive short. With a share price of 6.52 GBP (June 13, 2014 closing price) and a book value of 4.41 GBP(at current exchange rates), the market is pricing in significant returns for this global reinsurer. Given the abundance of third-party capital and continued pressure on reinsurance rates, this 48% premium seems irrational. The loss of key executives should serve as a potential warning sign for investors.

I believe that the onslaught of third-party capital will continue in the reinsurance space. As a result, the robust returns that Lancashire achieved in previous years will come under pressure and the market will revalue shares in line with other reinsurance companies. Furthermore, it appears that Lancashire is losing the benefit of float and to achieve adequate returns on equity, the group is going after riskier lines of business that could be heavily impacted during multi-catastrophe years. If the thesis is correct, Lancashire Holdings could see more than 40% downside and in catastrophe heavy years could fall more than 50%.

Reinsurance Shift

The convergence of low-interest rates, unhappy shareholders, and a drive to diversify has caused the reinsurance market much stress. Pensions and endowments are looking for yield that isn't correlated to the general market, and catastrophe reinsurance risk does the trick. In this game, the lowest cost of capital wins, so when alternative groups, flush with cash, try to beat reinsurance companies, alternatives win almost every time. This has lowered rates to a point where Warren Buffett is now avoiding writing hurricane insurance in Florida. The shift in rates is causing other structural changes to reinsurance as well.

The biggest change is the diminished use of float. Most of the time a reinsurance company will received ceded premium from insurers. This premium can be invested and the return on those investments is collected until a loss event occurs. Any fan of Warren Buffett knows this is the basic principle to float, and it is easy to understand why reinsurers like this. This is changing due to all the excess capital and insurance companies are able to demand collateralized reinsurance. The advantage of float is effectively eliminated and insurers have much quicker access to their reinsurance proceeds upon a loss event. This works quite well for definable loss events that are short tail in nature. As a result, many reinsurance companies are forming sidecars that house third party capital and underwrite the risk. They are effectively becoming specialized asset managers for property insurance and certain casualty lines.

This collateralization of assets diminishes investment returns. If normally a reinsurer writes risk with a 90% combined ratio and generates a 5% investment return, the collateralized portion will return zero. Therefore, a reinsurer would see a drop in their returns on equity. In an era of ultra-low interest rates, this isn't a big deal. In the future, if rates rise, this will dramatically impact future investment returns. The influx of capital and low interest rates has many insurers seeking returns in specialty lines or mergers. This is normal and part of every insurance cycle but it is a potential sign of trouble.

To briefly summarize the changes within the reinsurance industry:

- Alternative capital (including hedge funds, pensions and endowments) is entering reinsurance via sidecars and catastrophe bonds. This market has exploded in size and currently represents 15% of reinsurance capital.
- Alternative capital has a lower cost of capital compared to traditional reinsurers. They will accept lower returns on equity deployed and will allowing the contract to be collateralized. Thus reinsurance rates, especially in lines such as property excess of loss and retrocession, are declining rapidly and there is less

float for reinsurers. Diminished float lessens investment returns and eliminates a key advantage for insurers.
- This is driving many reinsurers to seek out returns elsewhere. There is a movement towards writing specialty risk in the hopes of keeping ROEs high.

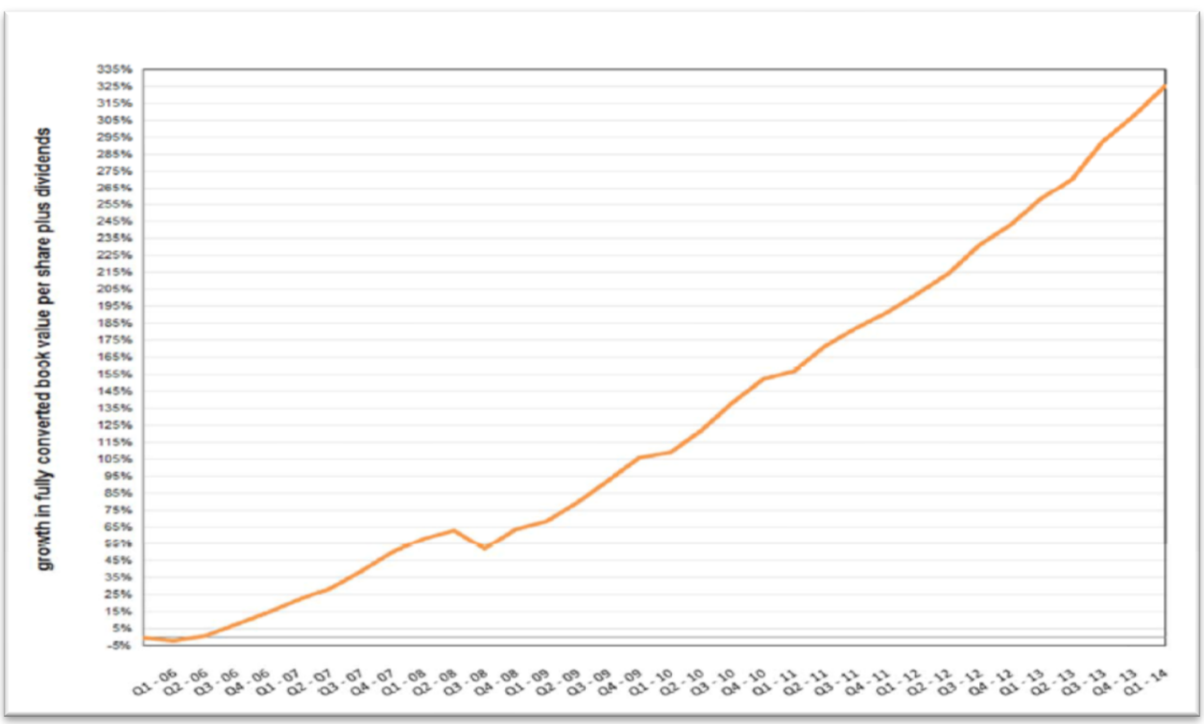
Lancashire Holdings Background

Richard Brindle founded Lancashire in 2005, one of many reinsurers dubbed "the class of 2005." The company was formed to focus on short-tail, specialty property insurance primarily in the aviation, property, energy and marine areas. Shareholder returns have been nothing short of impressive since Brindle founded the company, with a 5-year compounded annual return on equity in excess of 19%. The company is somewhat unusual because it returns almost all (and sometimes an excess of) profit generated from premiums each year. The growth in premiums and adjusted book value can be seen in the table below.

Table 1. 2009-2013 Premium Growth and Combine Ratio from Company Filings

	2009	2010	2011	2012	2013
Tangible Equity(M)	$1,378	$1,286	$1,326	$1,387	$1,424.4
Gross Premiums Written(M)	$627.80	$689.10	$632.30	$724.30	$679.70
Net Premiums Written(M)	$577.10	$649.90	$565.10	$576.10	$557.60
Combined Ratio	**44.60%**	**54.40%**	**63.70%**	**63.90%**	**70.20%**

Graphic 1. Growth in Fully Converted Book Value per Share plus Dividends since Inception Source: Q1 2014 Financial Supplement



Lancashire bulls will insist that the company is diversified, agile, and unlike other insurers. The company writes risk in four primary lines: property, marine, energy, and aviation, all these lines are well covered by other reinsurers. The past five years premiums and underwriting income can be seen below.

Table 2. Premiums and Underwriting Income by Segment Source: LRE Financial Statements

In Millions	FY 2013	FY 2012	FY 2011	FY 2010	FY 2009
Gross Property Premium	$333.40	$356.50	$279.80	$323.60	$317.30
Net Property Premium	$266.50	$259.40	$238.60	$304.70	$300.10
Underwriting Income	$159.20	$132.40	$91.10	$164.70	$256.60
Net Premium/Gross Premium (%)	**79.9%**	**72.8%**	**85.3%**	**94.2%**	**94.6%**
Gross Energy Premium	$209.90	$240.90	$229.00	$238.30	$175.50
Net Energy Premium	$171.40	$214.20	$210.70	$224.40	$162.00
Underwriting Income	$93.00	$129.00	$99.50	$109.40	$60.80
Net Premium/Gross Premium(%)	**81.7%**	**88.9%**	**92.0%**	**94.2%**	**92.3%**
Gross Marine Premium	$63.00	$81.00	$76.40	$76.40	$73.70
Net Marine Premium	$51.80	$60.50	$72.50	$75.50	$64.40
Underwriting Income	-$24.80	-$2.40	$48.20	$21.80	$24.10
Net Premium/Gross Premium(%)	**82.2%**	**74.7%**	**94.9%**	**98.8%**	**87.4%**
Gross Aviation Premium	$48.90	$45.90	$47.10	$50.80	$61.30
Net Aviation Premium	$45.10	$42.00	$43.30	$45.30	$50.60
Underwriting Income	$14.60	$30.10	$41.00	$46.30	$48.50
Net Premium/Gross Premium(%)	**92.2%**	**91.5%**	**91.9%**	**89.2%**	**82.5%**

While it is pleasant to say the company is diversified, in the past five years 52% of the cumulative underwriting income was generated from property reinsurance. I believe it is safe to safe that a majority of the expertise in Lancashire's underwriting department is dedicated to property. In a period of weakening reinsurance rates, especially in large property lines, it pays to see where Lancashire is taking risk. The table below shows Lancashire's peak zone estimated losses for 1:100 and 1:250 year events.

The three largest exposures within peak zones are Gulf of Mexico, Pan-European Windstorm, and California Earthquake. Of particular notice is the net exposure in Gulf of Mexico, which Lancashire defines as a "landing hurricane from florida to texas(sic)". Both 100 and 250 year event exposure is increasing and over the past 15 months net peak exposure has increased by 16%. Now, if rates were increasing, or perhaps even stable, this would be understandable to gain customer traction and increase premiums written. That is not the case though.

Adding to the situation is the net premium/gross premium ratio shown in Table 2 above. In 2013 the net premium as a percent of gross premium within the property segment was 79.9% versus 72.8% in 2012. In a period of decreasing reinsurance rates, Lancashire is keeping more reinsurance premium and ceding less to other reinsurers. This isn't a good idea according to John Charman, Chairman of Endurance Specialty Holdings. Charman stated in the Q1 2014 earnings call "I have never known companies historically, and I've been in four market cycles now, that have substantially reduced their reinsurance buying going into the softest part of the cycle to outperform."

Table 3. Peak Zone Exposure

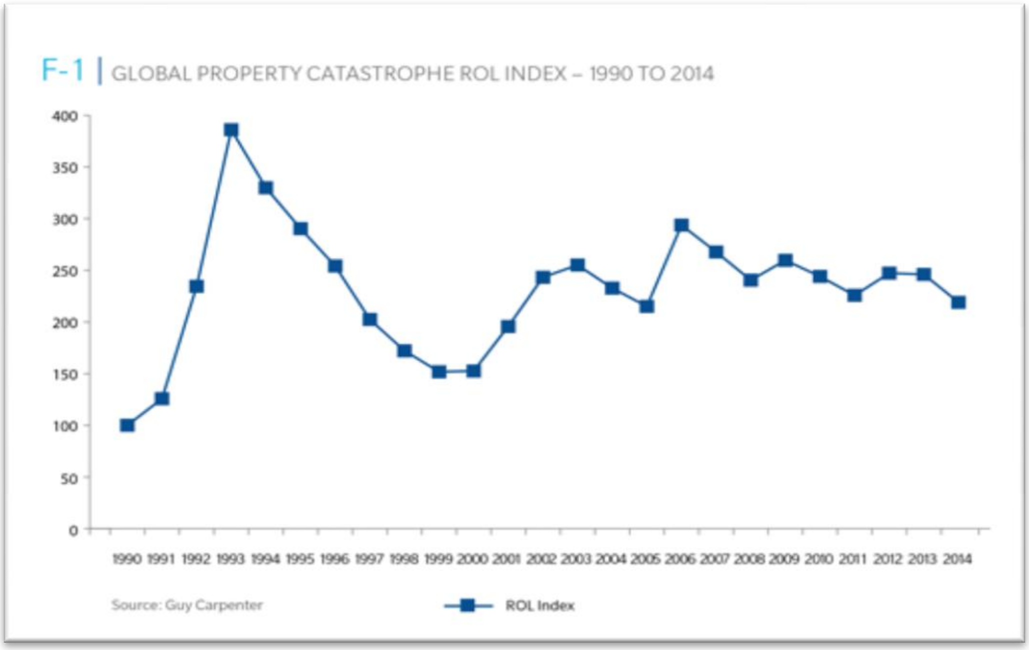
In Millions	Net Loss 1:100Y Event				
Peak Zone Peril As Of:	1/1/2011	1/1/2012	1/1/2013	1/1/2014	3/31/2014
Gulf Of Mexico Hurricane	$244.8	$328.7	$249.6	$287.3	$291.4
California Earthquake	$115.3	$99.0	$103.0	$139.5	$130.6
Pacific Northwest Earthquake	$45.0	$60.8	$33.3	$48.4	$47.4
Pan-Euro Windstorm	$116.9	$202.5	$155.4	$166.6	$172.8
Japan Earthquake	$110.3	$172.5	$144.6	$116.5	$108.8
Japan Typhoon	$75.5	$143.6	$135.0	$90.5	$82.8
	Net Loss 1:250Y Event				
Peak Zone Peril As Of:	1/1/2011	1/1/2012	1/1/2013	1/1/2014	3/31/2014
Gulf Of Mexico Hurricane	$352.9	$449.7	$376.8	$418.6	$440.4
California Earthquake	$204.2	$231.3	$216.4	$226.6	$213.1
Pacific Northwest Earthquake	$153.3	$186.1	$145.7	$150.6	$135.6
Pan-Euro Windstorm	$184.3	$268.2	$219.7	$233.2	$248.2
Japan Earthquake	$200.5	$293.8	$243.0	$175.0	$183.7
Japan Typhoon	$171.8	$294.1	$322.2	$137.4	$119.0

While Lancashire would like you to believe they are not as impacted by the price decreases, their financial statements tell a different story. In each quarterly press release Lancashire shows a Renewal Price Index (RPI) for their major lines. This shows trends in premium rates and "reflects the Lancashire Companies' assessment of relative changes in price, terms, conditions, and limits on like for like renewals only, and is weighted by premium volume." In Q1 2014 Property retrocession and reinsurance came in at 89%. For the full year of 2013, RPI was 97%. Interviews with management teams at various Gulf of Mexico property insurers have confirmed the lower rates.

This rate decrease is not going to change anytime soon either. United States property catastrophe reinsurance renews on June 1 each year. This year's renewal was the same story as last year and rates dropped between 5-20%. If a drop in rates hurts companies, relaxation of terms can kill. Interviews with industry experts, lawyers, and management teams led me to believe that the terms of these contracts are becoming much more favorable for primary insurers. While it is easy to quantify rate, the terms of a contract are equally important and will often influence the underwriting profitability any given year. The trend is obvious and spreading elsewhere. In the graphic below, the impact on rates can be seen for Global Property Catastrophe rates.

It is easy to say "but the rate of decline isn't that much compared to other years." I believe that would be ignoring the forest for the trees. Alternative capital is a much larger force than past years, accounting for almost 15% of global property catastrophe reinsurance limit. This compares to only 8% in 2008. I believe that alternative capital is here to stay, a sentiment shared by numerous industry insiders. There are few facts that indicate decreasing prices across lines won't continue. I remind readers that 52% of all Lancashire's underwriting profit came from property lines in the past five years, the most price pressured lines. Lancashire is trying to go with the punches and is focusing on collateralized reinsurance via their sidecars and Kinesis vehicle.

Graphic 2. Guy Carpenter Global Property Catastrophe Rate on Line Index. Courtesy: Guy Carpenter



Kinesis and Sidecars

As stated previously, the reinsurance market is seeing rapid growth of collateralized reinsurance vehicles. These products allow primary insurers to gain quicker access to their funds on a loss event but take away the advantage of float for reinsurers. In 2010 collateralized reinsurance capacity was more than $31 billion, and this number has risen to more than $50 billion today. This is expected to grow to more than $150 billion by 2020. Simply put, this is the new face of reinsurance.

Lancashire, like almost all other reinsurers, is jumping on the bandwagon and allowing alternative capital to participate in reinsurance investment opportunities. Their first sidecars were Saltire and Accordion. Both utilized Lancashire's underwriting department to place risk and Lancashire participated in both vehicles with an equity investment. In 2013 Lancashire saw a $9.2 million gain from their 20% interest in Accordion and 16.9% interest in Saltire.

Accordion acted as a captive retrocessional reinsurer for Lancashire Re. In 2012 the company ceded $12.2 million to Accordion and in 2013 $47.9 million was ceded to Accordion. While not a large number, taking premium that Lancashire Re wrote and ceding it a sidecar that Lancashire's capital is participating in doesn't seem like real risk reduction, just risk shifting. Both Accordion and Saltire were temporary in nature. According to the 2013 Annual Report "it is now apparent that client demand and investor interest allow for the creation of a more permanent capital markets solution, and that is what Kinesis aims to be."

Kinesis intends to focus on short-tail classes and the "overall strategy has a double digit target return for investors on an expected basis." (Page 7 2013 Annual Report) With that strategy Lancashire launched Kinesis in January of 2014 with a $250 million limit, of which Lancashire contributed 10%. Kinesis is branded as multi-class solution with expected losses of 8-10% and a targeted size of $300-$500 million of funding for 2014.

If Kinesis reaches the upper levels of size ($500 million), Lancashire would participate in $50 million of premium. This constitutes roughly 7% of their total premium written in 2013. According to Darren Redhead, CEO of Kinesis, "we maintain an alignment of interest with Lancashire by requiring them to buy 10% of the shares at each offering."

This forced participation is critical. If Kinesis continues to grow as expected, Lancashire will be required to put more and more capital into Kinesis. Besides the different risks involved (Kinesis writes risk for elemental and non-elemental under the same limit, a rarity for reinsurers), Lancashire loses the ability to invest the capital into other securities such as bonds, equities, etc. This creates a tricky situation for Lancashire, who will be impacted by reduced investment returns going forward.

Valuation

As always, a firm valuation is tough to nail down. However, I think several things are clear:

1. Reinsurance rates are dropping.
2. Property, the main line that Lancashire operates in, is coming under tremendous pressure from alternative capital. This is causing other reinsurers to venture into other lines.
3. There is a firm shift towards collateralized reinsurance, which will limit the utility of float.
4. Lancashire is taking more risk in peak peril zones and ceding less premium to other reinsurers.

If one believes the above statements are true, it is fair to conclude that Lancashire will have a significantly more difficult time generating their historical returns. Investment returns were never of great importance at Lancashire and with the rise of collateralized reinsurance, I believe investment returns will be negligible for years to come. If rates continue to drop 10-20% it seems reasonable to expect returns on equity to return to more mundane levels, in-line with other reinsurers. Finally, what hasn't been noticed by the market is that Lancashire's combined ratio has steadily crept up over the past five years (see Table 1). This could indicate sloppier underwriting or increased competition.

I believe, and peak perils seem to indicate, that Lancashire has benefited from abnormally low catastrophe years while writing premium well out on the risk curve. Based on that, there is little reason for the company to trade above book value or at a premium to other reinsurers. The table below shows the price to book of other reinsurers.

Table 4. Public Reinsurance Comps: Authors Calculations

	Property Premium/Total Premium	Price-to-Book
Arch Capital Group	14.4%	1.38
Aspen Insurance	35.3%	1.11
AXIS Capital	42.3%	0.98
Everest Re Group	55.3%	1.05
Validus Re	75.5%	0.96
Platinum Underwriters	41.0%	0.99

The flaw in relative analysis is that it makes no adjustments for alternative business practices. For example, several of the groups listed above have insurance subsidiaries, offer large casualty lines, or have a merger pending. If a company has a large insurance subsidiary, they will benefit from lower reinsurance rates. These subtle differences will impact valuations. Also, I believe that insurance is a soft commodity and most of the time the lowest cost will win. Even if the lowest cost doesn't win, a reinsurance company can't price their business at say, a 100% premium, even if their relationships or service are second to none. In businesses where the lowest cost wins, there is an inherent advantage to scale. Lancashire has neither diversification in different lines, nor does it have the scale of many global reinsurers to shield it from declining rates.

What Lancashire does have is a high valuation. Lancashire's book is being written in softening lines, yet the company trades at a 1.48X book value, this makes no sense. I believe with all the aforementioned issues, Lancashire should trade at book value at best, roughly in-line with other reinsurers that have large property books. If Lancashire were to trade at book value, the stock would have 33% downside. Should a big cat year form, and they always do, it's just a matter of when, I would expect Lancashire to take large losses given their exposure to peak peril zones. In 2011, a large catastrophe year, it was not uncommon to see reinsurance group's trade at or below 0.8X book value. I believe a year with multiple major catastrophe events could cause Lancashire to trade down well below book value, especially with the onslaught of capital suppressing rates across numerous lines. If Lancashire were to trade down to 0.8X book value, shares would trade at 3.52 GBP, which is 46% downside compared to today's prices.

Another reason that shares could fall is reduced dividends. While Lancashire stands out for being a company that pays out all earnings, this attracts a certain kind of investor. Some uncertainty about dividends in 2014 caused issues for the stock price this year. Should earnings drop due to rate declines or catastrophes, I expect investors to rush for the exits.

Management Departures

This final point is rather minor, but I believe it deserves some explanation. Whenever a company sees key employees leave it should raise some eyebrows. Perhaps it means nothing, perhaps it means the employees simply had better alternatives, and sometimes it means the employees are getting out while the going is good. For Lancashire I found it surprising that founder Richard Brindle and Lancashire Bermuda Chief Underwriting Officer Simon Fascione departed. The later is much more interesting for shorts. Mr. Fascione was slated to run Lancashire Capital Management, the division that helps run Kinesis and the other collateralized vehicles.

The loss of founder Brindle is no better, although it is speculation to guess what caused him to leave. Regardless, seeing two executives pack their bags may indicate that the best days are behind Lancashire.

Conclusion

Lancashire Holdings did a great job of entering the reinsurance market when rates were high in 2005. However, almost nobody could have predicted the onslaught of alternative capital that can accept the same risks at much lower rates. The sudden changes to reinsurance market should cause a structural shift to the whole reinsurance market. I believe that reinsurers who enjoyed abundant returns on excess-of-loss property lines, like Lancashire, will be the worst hit as those lines are most easily swapped into collateralized products.

The loss of float from collateralized products will erode away at reinsurers returns and slowly drop returns on equity. As reinsurance rates continue to drop Lancashire will face the same problems that the rest of the industry has to contend with. As such, Lancashire's premium valuation is unjustified in today's market. I believe Lancashire's shares are overvalued by at least 33% and perhaps as much as 50% if a multi-catastrophe year strikes again. The departure of key executives likely foreshadows an inflection point in Lancashire's history.

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