

Public Newsletter for the period ended
30 September 2017

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1. Foreword

Fellow Investors,

Welcome to the Lighthouse Advisors newsletter for September 2017.

This newsletter follows the same format as previous issues. The special topic for this issue is **Unbilled Receivables**.

2. Market Commentary

Major stock markets shook off worries about the US, Europe, China, and North Korea. Indices continued to climb.

Market Index / Change	3Q17	9M17
S&P 500	+4.0%	+12.5%
Euro Stoxx 50	+4.4%	+9.2%
UK FTSE 100	+0.8%	+3.2%
Nikkei 225	+1.6%	+6.5%
Shanghai Composite	+4.9%	+7.9%
Hang Seng Index	+7.3%	+25.2%

Given US president Donald Trump's inability to unite the Republican party, exactly zero major policies have been passed to date, whether in international trade, healthcare, or tax reform, making the Trump administration the unwitting caretaker of Barack Obama's third term. It is thus business as usual, which bodes well for the US economy. Investors have bid up the US stock market accordingly.

In Europe, the Catalonia region of Spain made news when it declared independence. However, the referendum underpinning the decision had a low turnout of just 43%, and

was later ruled to be illegal¹. Spanish prime minister Mariano Rajoy has dissolved the Catalan administration and placed it under direct rule from Madrid pending fresh regional elections. Eight members of the former Catalan government are now in jail², while its former president Carles Puigdemont has fled to Brussels. The rest of Europe has expressed support for the Spanish government, so it is unlikely Catalonia will secede anytime soon.

In China, economic growth is proceeding as planned. The official Purchasing Managers' Index has remained above 50, signaling continued expansion. This year it fell below 50 only once, in May. Listed companies' results corroborate the survey indicators with strong recoveries in multiple sectors, notably shipping and capital goods. The turnaround has sparked a change in investor sentiment, pushing the Hang Seng Index to multi-year highs on hopes that the "China story" is intact.

Some people are concerned that tensions over North Korea may escalate into nuclear war, whether on purpose or by accident. They point to recent North Korean nuclear tests³ as well as belligerent pronouncements by both Donald Trump and Kim Jong Un as reasons to fret. However, a common-sense analysis makes clear nuclear war is not worth worrying about.

First, North Korea obviously has no plan to strike first, since it could not possibly survive a US retaliation. The only logical use for the North Korean artillery pieces and rocket launchers deployed in the mountains near Seoul is to deter an attack on North Korea.

Second, it is widely acknowledged that no pre-emptive strike by the US can eliminate all the

¹ *Catalans protest sedition case, court declares vote illegal, AP News*, 17 Oct 2017.

² *Spanish judge jails eight members of deposed Catalan government, The Guardian*, 2 Nov 2017.

³ *In latest test, North Korea detonates its most powerful nuclear device yet, The Washington Post*, 3 Sep 2017.

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artillery and rockets threatening Seoul. North Korea would thus retain a “second strike” capability allowing it to bombard Seoul in return. A US attack is even riskier if North Korea already has a usable nuclear weapon; any nuclear retaliation would obliterate Seoul.

No North Korean attack, no US attack, so no war on the Korean peninsula. What then? There are 2 plausible long-term outcomes.

The first outcome is that China tires of North Korea’s behaviour and removes Kim Jong Un, installing a puppet government in Pyongyang. The US itself provides plenty of inspiration. Below is a non-exhaustive list of countries where the US “interfered with domestic politics” during the 20th century:

Country	Dates	US Action
Nicaragua	1912-1933	Invasion and occupation
Haiti	1915-1934	Invasion and occupation
Dominican Republic	1916-1922	Invasion and occupation
Iran	1953	Assisted in coup against democratic government
Guatemala	1953-1954	Funded insurgency against democratic government
Cuba	1961	Bay of Pigs invasion against Cuban leader Fidel Castro
El Salvador	1981-1992	Funding and training of military forces during civil war
Grenada	1983	Invasion and change of government

China’s annoyance with North Korea can be seen in its recent foiling of an assassination attempt on Kim Jong Un’s nephew⁴. Kim Jong Un is surely aware of this, and his lack of travel outside North Korea since taking power may well be a measure to avoid any real-life *Series of Unfortunate Events*.

The second, more likely outcome is that North Korea eventually develops a usable nuclear

⁴ *Beijing busts assassins trying to kill Kim Han-sol, Korea JoongAng Daily, 2 Nov 2017.*

arsenal. South Korea and Japan will then demand nuclear weapons too. The US will have to acquiesce and deploy nuclear weapons in both South Korea and Japan, essentially replaying the Cuban missile crisis. With all of North Asia armed with nuclear weapons, **peace** will break out. Obvious comparisons can be made with the Cold War and India-versus-Pakistan: once all sides had nuclear weapons, tensions cooled as it became clear that nobody would win in a nuclear war.

In other words, any short-term stock market uncertainty caused by fears about North Korea should be viewed as a long-term **buying** opportunity. When the markets eventually recover, those who had the courage to buy in times of fear will reap the rewards.

Corporate activities continue apace in the Fund’s key markets. There remain many promising investment candidates, and cash is being put to work in both special situations and conventional investments. While market volatility is to be expected, the earnings outlook for the last quarter seems good. The next newsletter will cover the quarter ended 31 December 2017.

Benjamin Koh
Chief Investment Officer
Lighthouse Advisors
6 November 2017

3. Portfolio Review

As at 30 September 2017, the Net Asset Value (NAV) of the Fund was USD 109.35. Net of all fees, the return for the third quarter was +2.1%, while the total year-to-date return for 2017 was +21.2%.

For reference, during the 3 months and 9 months ended 30 September 2017, the changes in the Fund’s key markets were:

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Market	Index	3Q17	9M17
Singapore	STI	+0.1%	+11.8%
Hong Kong	HSI	+7.3%	+25.2%
Shanghai	SSE	+4.9%	+7.9%

22 securities made up 84% of the Fund's holdings, with the balance in cash. NAV values are tabled in Annex I.

To protect the interest of clients, detailed discussion is confined to the client-only version of this newsletter. Client newsletters are embargoed for one year, after which they are made available online.

4. Unbilled Receivables

Normally, companies recognize revenue when title to goods has been transferred, or services have been delivered, and there is no possibility of a refund outside of returns or warranty policy. This is fairly simple for companies that sell millions of widgets or provide short-term services: a product is sold, or a service is delivered, and cash is received.

However, many companies provide goods or services over long periods of time that span more than one accounting period. In extreme cases, years of work can be paid at one go. Recognizing revenue at the point of payment can make financial statements "lumpy" and difficult to understand.

As a result, companies with lumpy projects tend to use either the installment or percentage of completion method of revenue recognition. Installment accounting breaks the project into two or more portions, usually tying revenues and payments to specific milestones in a project. These may be modules in a software application, the various stages of real estate construction and so on. This makes the revenue less lumpy since some portion of the revenues can usually be recognized each year, but is still less smooth than a company that sells millions of widgets.

With percentage of completion, the company estimates the amount of work that has been done and recognizes the revenue accordingly.

This creates a smooth revenue stream for the company and can be helpful for investors trying to compare several such companies.

However, the downside of using a percentage of completion method is that revenues and profits are recognized **even when the customer has not been billed**. Except for truly gargantuan projects, not many customers are willing to be billed for each incremental percent of work done, so installment payments are the norm for long-duration projects, even if the company recognizes its revenues using the percentage of completion method.

This difference between *recognized* revenue and *billed* revenue shows up as "unbilled receivables" on the balance sheet. For this topic we discuss **Ace Achieve Infocom** and **Triyards Holdings**, as well as 2 peers for comparison.

Ace Achieve is listed in Singapore. Its annual report states that it provides telecom network infrastructure and information and communication technologies solutions for China's 3 main telecom operators: China Telecom, China Mobile, and China Unicom. Over the last 5 years, reported sales were RMB 214-238m. Net profits ranged from RMB 13-21m, implying margins of 5.5-8.8%. In short, it looks like a fairly steady business.

However, the balance sheet tells a different story. During FY08-FY12, cash conversion days (accounts receivable days, plus inventory and work-in-progress days, less accounts payable days) were 426-650 days. For FY13-FY17, the cash conversion cycle was 798-919 days. By any reasonable measure, a cash conversion cycle that exceeds one year is inordinately long, so the company is an extreme outlier. Its business model essentially requires huge amounts of working capital.

Its annual reports state that Ace Achieve uses "percentage of completion" for revenue recognition. Unbilled receivables averaged 77% of total receivables during FY08-FY17. So in any given year, three-quarters of the revenues had *not* been billed to customers.

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This unbilled revenue ranged from 48-125% of shareholder equity. In other words, in the last 9 years, anywhere from half to more than 100% of the company's net worth consisted of profits from invoices that had not been presented to customers!

This begs the question: if customers have not been presented with invoices, and hence cannot vouch for the contracts, who is to say whether the contracts are real? Given that the company's trade receivables averaged over 600 days of sales from FY08-FY17, a fake contract could generate revenue and profits for an average of 20 months before it would become due for collection and then be uncovered as false. Indeed, the auditors, Moore Stephens LLP, seem to be aware that the unbilled receivables could be partly or wholly uncollectable, and have accordingly issued disclaimers of opinion for the last 5 years. Since FY13, they have *not* stated that they believe the accounts of Ace Achieve to be "true and fair".

Investors are understandably skeptical: as of this writing, the shares trade at 2 times reported earnings and 20% of book value. But given that the auditors don't believe the accounts, maybe investors shouldn't either.

Might Ace Achieve's cash collection woes be a standard feature among Chinese telecom contractors? One possible peer is **Comba Telecom**. Comba is listed in Hong Kong and provides wireless network equipment and related engineering services to the 3 Chinese telecom operators, who accounted for 75% of revenues in 2016.

One might expect Ace Achieve and Comba to have similar working capital cycles, as they operate in the same industry and face the same customers. However, Comba uses the sale of goods methodology for revenue recognition, so there are no unbilled receivables on its balance sheet. For the last 9 years, Comba's trade receivables averaged 230 days of sales, versus 600 days for Ace Achieve, and its cash conversion cycle averaged 104-296 days, against 798-919 days for Ace Achieve.

Despite having the same customer base as Ace Achieve, Comba does not have problems collecting on its invoices, and its auditor Ernst & Young has issued a "true and fair" opinion on the accounts every year since 2003.

The next example of unbilled receivables is Singapore-listed **Triyards Holdings**. Triyards owns 2 fabrication yards in Vietnam and one fabrication facility in Houston, USA. It builds components for offshore structures, and also builds and repairs offshore oil and gas vessels.

Like Ace Achieve, Triyards uses "percentage of completion" to recognize revenue and profits. However, it bills customers in installments based on milestones, so its balance sheet shows unbilled receivables.

Triyards went public in late 2012. Since then, unbilled receivables have ranged from 41-69% of total trade receivables. These represented 37-53% of shareholder equity, so one-third to half of its net worth came from invoices its customers had yet to see.

Similar to Ace Achieve, Triyards has had problems collecting money once the invoices were actually presented: receivable days have averaged 218 days since its listing. Its annual reports suggest its receivables management has plenty of room for improvement:

USD mn	FY13	FY14	FY15	FY16
Trade Receivables	108.2	156.9	148.4	170.3
Unbilled Receivables	57.5	63.8	77.0	117.3
Unbilled Rec. vs. Trade Rec.	53.1%	40.7%	51.9%	68.9%
Billed Receivables	50.7	93.1	71.4	53.0
Rec. Overdue > 180 days	17.2	34.3	1.2	40.6
Rec. Overdue > 180 days vs. Billed Rec.	33.9%	36.8%	1.7%	76.6%

Not only has Triyards been slow to invoice its customers, causing a buildup of unbilled receivables, but once invoiced the customers are also slow to pay. FY15 was the only year when customers seemed to pay up on time.

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However, in FY16 things went wrong in a big way. 69% of receivables were unbilled, and of the 31% actually billed, 77% was overdue by more than 180 days. Overall, in FY16 the recognized revenues were converting to actual cash at a rate of less than 7%.

This inability to collect cash has forced the company to borrow for its working capital needs. But borrowing is a short-term measure: if Triyards can't get paid by customers, it will eventually be unable to pay its lenders too. Indeed, on 6 Sep 2017, Triyards announced:

"... the Group has experienced delays in delivery and collections from its clients for certain completed projects due to the fact that the client(s) are severely affected by downturn in the Oil & Gas industry."

"The delay of collections from certain projects and limited liquidity resources has put the Group in a position where it is unable to meet certain loan repayments."

The stock has since been suspended from trading, and restructuring seems to be a given. With the current oversupply and low utilization rates of oil and gas vessels, lenders are unlikely to recover much from asset sales, so shareholders will probably be wiped out.

Are unbilled receivables a feature of the oil and gas related construction industry? **Sembcorp Marine** is a rigbuilder listed in

Singapore. It too is facing difficulties, notably after the bankruptcy of Sete Brasil, which had placed US\$4bn of orders with Sembcorp Marine. However, it remains solvent with no going-concern issues.

Sembcorp Marine also uses "percentage of completion" to recognize revenue, but unlike Triyards, it has mostly been able to collect on its invoices, and provisions have been made for customers who have trouble paying.

Trade receivables averaged 32 days of sales during 2013-2016, versus Triyards' 218 days. Receivables have risen to 112 days of sales as of 30 Sep 2017, showing deterioration in line with industry difficulties, but nowhere near the death spiral experienced by Triyards. As for Sembcorp Marine's unbilled receivables, these have historically been less than 5% of total trade receivables.

So what we see in these 4 companies is that it is not enough to report a profit: customers must be invoiced, and cash collected. Down with unbilled receivables!

"Profit is an opinion, cash is a fact."

- source unknown

"Show me the money!"

- **Jerry Maguire**

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Annex I

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2008										34.16	33.49	35.62	+4.3%
2009	34.57	33.52	33.37	36.69	46.20	46.00	50.06	49.68	52.66	54.17	56.68	59.94	+68.3%
2010	59.05	61.09	65.17	68.27	64.14	65.69	70.65	72.24	81.06	83.56	85.10	90.30	+50.6%
2011	87.21	86.29	88.13	92.81	90.85	91.35	91.17	83.69	69.04	78.23	73.00	72.88	-19.3%
2012	77.40	82.90	82.52	83.32	76.36	77.25	77.27	77.91	80.57	79.44	82.70	84.92	+16.5%
2013	91.43	97.36	99.96	100.24	99.14	95.09	98.50	100.00	100.86	102.24	102.63	102.93	+21.2%
2014	99.15	101.78	99.80	101.84	105.45	106.57	109.05	108.58	103.60	103.91	101.87	99.94	-2.9%
2015	97.97	98.16	97.74	103.80	103.69	100.99	96.17	85.91	84.17	88.91	86.20	86.35	-13.6%
2016	81.56	83.81	88.82	92.18	91.50	91.52	94.48	94.86	94.87	93.34	91.92	90.20	+4.5%
2017	93.18	97.08	101.10	101.39	105.74	107.11	109.67	108.57	109.35				+21.2%

Note: The Net Asset Value of the Fund has been linked to the rebased NAV of the Reference Account, which had the same investment style. Until the launch of the Fund, the Reference Account served as the model portfolio for all the separately-managed client accounts. Its trading records were distributed to clients as proof that the Manager's interests were fully aligned with those of the clients. The Reference Account was started at the end of 2008 and became inactive following the launch of the fund on 1 September 2013.