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Public Newsletter for the period ended 31 December 2016

1. Foreword

Fellow Investors,

Welcome to the Lighthouse Advisors newsletter for December 2016.

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

2. Market Commentary

2016 was a busy year for the Grim Reaper. In music, David Bowie attained escape velocity to join "Major Tom" of *Space Oddity*, George Michael had his *Last Christmas* and Prince drove off in his *Little Red Corvette* under a shower of *Purple Rain*. Film star Carrie Fisher succumbed to the power of the **Dark Side**, while boxing icon Muhammad Ali lost his final sparring match and golf legend Arnold Palmer played his last round. The business world saw the passing of Andy Grove and Thomas Perkins, while iconic brands Faber-Castell and Mars bid farewell to their namesake leaders. In short, it was a bad year for many people. Especially those who died.

Also, voters in a small island kingdom chose to leave the European Union. In the ensuing chaos, the currency plummeted and the prime minister resigned. It is still unknown how or even whether "Brexit" will actually occur. In the event that the UK does leave, the odds of favourable trade negotiations are, to put it mildly, stacked against it: the UK has essentially **zero** negotiators working for it, as compared to **600** in the European Union[1]. Some still think that Prime Minister Teresa May will, like the manservant Baldrick of the television series *Blackadder*, unveil "a cunning plan". However, the general mood in the UK business community is more in line with Blackadder's quip that "I believe the phrase rhymes with *clucking bell*!"[2]

This mood resonated with *Toblerone* lovers in the UK when, in an attempt to reduce costs, **Mondelez International** altered the chocolates' distinctive shape, increasing the gaps between the triangles[3]. Apparently, some executives at Mondelez thought that customers actually bought *Toblerone* for its great value and delicious flavour. OK, you can stop laughing now. As it turns out, these customers did actually "mind the gap". It seems that the lessons of *New Coke* need to be learnt and re-learnt, over and over again[4].

On the other side of the Atlantic, Hilary Clinton did <u>not</u> get elected as the 45th president of the United States. Myriad reasons have been bandied about for the supposed anti-establishment vote, from the private email server fallout to fake news spread by Facebook, but the single biggest reason may have been that **many Americans simply didn't care**: the largest voter bloc was not *Red* or *Blue*, but *None of the Above*: turnout was estimated at 58%, so 42% of registered voters decided neither candidate was worth a vote.

Hilary Clinton and Donald Trump each took about 27% of the total vote pool. Clinton received slightly more votes from the public, but Trump got them where it counted – the

[1] *The UK has no trade negotiators, says former Brexit minister*, **Financial Times**, 15 July 2016.

[2] *Goodbyeee*, ***Blackadder Goes Forth***, 1989.

[3] *Toblerone triangle change upsets fans*, **Mirror**, 8 November 2016.

[4] *30 years ago today, Coca-Cola made its worst mistake*, **CBS News**, 23 April 2015.

states he won controlled more votes in the Electoral College. Because the voting was so close, it basically came down to chance – a few more voters in a couple of states, and the outcome would have been different. This time, the gods of chance decided that **Orange Is The New Black**. And so the mantle of "leader of the free world" (and commander-in-chief of the world's largest nuclear arsenal) passed to Donald Trump, a celebrity businessman with no prior political or military experience.

It is beyond this commentary to guess what a Trump administration might be like, except to note that the US has endured presidential administrations which were seen as corrupt, incompetent, or both, so it should also survive a Trump government, even if his critics' worst fears are realized. Ditto the rest of the world.

The biggest beneficiary of a Trump administration may well be China. Apart from blaming China during his campaign, Trump has shown little interest in Asia, which gives China a free hand to widen and deepen its influence in its own backyard.

Chinese money has already bought the loyalty of Laos and Cambodia. Over the next decade, projects funded by China will also draw the Philippines and Malaysia into China's orbit.

The Philippines has traded in its South China Sea dispute victory for restored access by Filipino fishermen to the South China Sea and some US$24bn of Chinese investments.

Malaysia has awarded the East Coast Rail Link (ECRL) project to China Communication Construction Corporation, a Chinese state-owned enterprise, at an estimated price tag of RM 55bn (US$12bn)[5]. To be built in 3 phases over 5 years, it will be fully financed by the Export-Import Bank of China, with repayment over 20 years, including an initial 7-year grace period free of interest and principal payments.

The first phase of the ECRL will connect Port Klang in the west with Kuantan in the east. The second and third phases of the ECRL will run northwards along the east coast of Malaysia and terminate at Tumpat near the Thai border, thus connecting the eastern coast of Malaysia to Kuantan.

Although the ECRL is being built in Malaysia, it is part of China's "One Belt One Road" strategy to improve its infrastructure links with the rest of the world.

How and why does the ECRL matter? At present, 80% of the world's East-West maritime trade passes through the Straits of Malacca, a narrow, crowded waterway. Past tensions in the Strait of Hormuz in the Middle East cannot have failed to draw China's attention to potential risks in the Straits of Malacca. So there is a <u>strategic imperative</u> to create alternative routes.

One such alternative is the China-Pakistan Economic Corridor (CPEC). It connects China to the Arabian Sea via 3,000 km of roads running the length of Pakistan, all the way down to the port of Gwadar in the southwest[6]. Not only does the CPEC bypass the troublesome Straits of Malacca, but Pakistan is a friendly neighbour hungry for foreign investment, and a port in Pakistan built and controlled by China will be a powerful strategic asset should China one day decide to be more active in the Indian Ocean.

Phase One of the ECRL creates a second alternative to the Straits of Malacca: containerized cargo from Europe can be offloaded at Port Klang, taken by rail to Kuantan, then reloaded on ships bound for China, and vice versa.

Further out, the ECRL may extend northwards from Tumpat into Thailand itself, for direct overland connection into southern China. It is not a far-fetched idea: China recently launched a rail freight service linking Yiwu and

[5] *China to pour in billions for rail project*, **The Star Online**, 1 November 2016.

[6] *China's New Silk Road Hinges on a Small Pakistan Port*, **Bloomberg News**, 30 September 2016.

London[7]. The rail service is cheaper than air freight and faster than sea freight, so there is a niche for it. But costs are a secondary consideration; *strategic availability* is what matters.

Beyond the stated benefits to China for its trade with Europe, the ECRL will have repercussions on the rest of Southeast Asia. Malaysian exporters will benefit, as they can move goods by rail to Kuantan for export to China. Two-thirds of Malaysia-China trade is indirect: most of it passes through Singapore via feeder services from Port Klang. This costs time and money. Exporting directly from Kuantan Port should yield meaningful savings. In future, there will also likely be the option to move goods directly to China by rail. So Malaysia should be a winner too.

Conversely, Singapore will be a loser[8]. There is no conceivable way to win back the Malaysia-China transshipment business, and the Europe-China transshipment business will now have to be shared with the ECRL. Given the high fixed costs of ports, Singapore's port profits will take a hit. However, it is not just the port itself, but the secondary businesses that feed off it, that will also be affected. From entrepôt trade to container handling, ship bunkering and ship repairs, shipping-related activities form about 7% of Singapore's GDP.

Consider what happened when the Port of Tanjung Pelapas (PTP) was built in Johor, Malaysia. In 2000, Maersk Sealand moved its transshipment operations from Singapore to PTP. This cost Singapore 10% of its container trade[9]. Evergreen and its Uniglory subsidiary followed in 2002, and 7% more of Singapore's container trade was lost. So the ECRL should not be underestimated.

In 2015, Malaysia-China indirect trade, largely via Singapore, was RM 200bn (US$45bn). This will essentially go to **zero** when the first phase of the ECRL is fully operational. From being Singapore's second largest trading partner after China, Malaysia will likely fall out of the top 15 list, as it changes from a key source of transshipment business to a mere supplier of eggs, vegetables and other assorted sundries for Singapore's tiny domestic market.

As for the Europe-China transshipment business, which is actually China's main target for the ECRL, it would not be unreasonable to expect the ECRL to eventually capture half or more of this business. The CPEC will also take some market share, so Singapore might end up with only one-third or less of its current Europe-China transshipment business.

The Pearl River Delta in China provides another sobering case study: as the ports in the Pearl River Delta have developed, they have taken business away from Hong Kong. Hong Kong's share of total port throughput in the Hong Kong and Shenzhen region fell from 78% in 2001 to 45% in 2015[10]. Hong Kong and Singapore may be more efficiently run than the upstart newcomers, but in the long run, geography wins. As in real estate, it is about "location, location, location".

Given its strategic importance, the ECRL is clearly a project *for* China, not a project *against* Singapore. The project has many merits, not least of which is the price tag of **free**: although China is *financing* it, Malaysia is *paying* for it, so it is a very good deal for China. The fact that Singapore will be negatively affected is simply an unfortunate side outcome. Collateral damage, as it were.

Elsewhere in Asia, the "Republic of Samsung" had a pretty bad year too. The country's president was impeached[11] and the chairman

[7] *All aboard the China-to-London freight train*, **BBC News**, 18 January 2017.

[8] *China projects in Malaysia to hit Singapore*, **The Star**, 15 Jan 2017.

[9] *Competition between the Ports of Singapore and Malaysia*, **National University of Singapore**, 2002.

[10] *Impact of Cabotage Relaxation and PRD Competition to Hong Kong Maritime Logistics Industry*, **Hang Seng Management College**, November 2016.

[11] *Park Geun-hye: South Korean MPs vote to impeach president*, **The Guardian**, 9 December 2016.

of Lotte Group was indicted for corruption[12], while the chairman of the National Pension Service (NPS) was arrested for pressuring the NPS to support the controversial merger of two Samsung Group companies[13]. The merger made it easier for the founding Lee family to control Samsung Group, and NPS' 11% stake in Samsung C&T was the swing vote.

The *chaebols* had previously been a law unto themselves, with the leaders of SK Group, Hanwha Group, Hyundai Motor and Samsung all receiving presidential pardons after convictions for accounting fraud, assault, embezzlement and tax evasion. It remains to be seen whether this time will be different.

India also suffered a blip when Prime Minister Modi decided to remove 86% of India's physical currency from circulation overnight and replace it with new notes. The underlying idea was that a lot of "black money", the proceeds from illegal activities, was being hoarded as large-denomination 500-rupee and 1,000-rupee notes. This money would either have to be deposited in large sums and risk investigation, or simply be abandoned.

Unsurprisingly, Indian ingenuity rose to the challenge: about 97% of the banned notes was deposited in banks or exchanged for other denominations[14]. Many methods were used, from having friends, families and employees individually deposit small sums, to buying expensive, fully refundable train tickets. Meanwhile, enormous queues formed at banks to get the new notes, while much of India's cash-based economy simply shut down. As usual, the poor, lacking credit cards, debit cards or other cashless forms of payment, suffered the most. Some bartered for goods and services[15], but others had to do without.

Misery loves company: unwilling to see India mess up alone, Venezuela joined in[16]. As **The Economist** drily noted, "Anything India does, Venezuela can do worse." President Nicolás Maduro announced that the 100-bolivar note, accounting for 77% of the physical cash, would not be legal tender within 72 hours. Instead, it could be deposited in banks and be replaced with new notes in denominations as high as 20,000 bolivars. Eventually.

Given that 100 bolivars were only worth about 3 US cents in December, this might seem to be a good idea. Except that the new notes didn't arrive on time, sparking violent protests and looting. The 100-bolivar note was then given a reprieve until January 20. Still, given that Venezuela is experiencing hyperinflation, the new 20,000 bolivar notes may not be worth much by the time the year is over: the IMF forecasts inflation of 1,660% in 2017[17].

So with 2016 being a year-long horror movie, and 2017 not looking any better, what should investors be doing? Your manager's answer is the same as always – invest in high quality businesses at a reasonable price, or purchase outright bargains mispriced by pessimism or ignorance. The greater the uncertainty, the bigger the rewards for those willing to do the work. The Fund continues to invest and welcomes subscriptions from new and existing investors alike. The next newsletter will be for the quarter ended 31 March 2017.

Benjamin Koh
Investment Manager
Lighthouse Advisors
15 February 2017

[12] *Family Behind Korean Conglomerate Lotte Is Indicted in Corruption Case*, **The New York Times**, 19 October 2016.

[13] *NPS Pressured to support Samsung C&T merger*, **Korea Times**, 17 November 2016.

[14] *Modi's Setback on Black Money*, **Bloomberg View**, 11 January 2017.

[15] *Barter Economy Is Reborn in Villages as India Cancels Cash*, **The Wall Street Journal**, 18 November 2016.

[16] *Cash and grab: Venezuela's lunatic experiment in demonetization*, **The Economist**, 17 December 2016.

[17] *Venezuela hikes minimum wage 50% as hyperinflation rages*, **CNN Money**, 9 January 2017.

3. Portfolio Review

As at 31 December 2016, the Net Asset Value (NAV) of the Fund was USD 90.20. Net of all fees, the loss for the fourth quarter was -4.9%, bringing the total return for 2016 to +4.5%.

For reference, in 2016, the indices in the Fund's key markets of Singapore and Hong Kong moved -0.1% and +0.4% respectively. In Shanghai, a new market for the Fund, the Shanghai Composite fell 12.3%.

23 securities made up 90% 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. Subsidies

Governments have long used subsidies to promote activities they consider desirable, and additional taxes to discourage undesirable activities. It is not wrong for investors to invest into companies that receive subsidies or suffer penalty taxes. But it can be dangerous to assume the status quo will continue forever.

In some cases, investors can safely assume that the status quo is stable. For example, many companies receive industrial land at below-market prices, or are allowed to import manufacturing equipment without paying customs duties. Because the cost to the government is both indirect and one-off, retroactive demands for repayment are unlikely. Even if the company fails to meet the agreed conditions, at most the penalty is the loss of such subsidies for future projects.

However, subsidies that require recurrent cash outflows are a different matter. These have a direct impact on government coffers and are viewed differently, even if the net economic impact on the budget is the same.

Governments can and do change their minds. One example is the solar power fiasco in Spain. From 1997 through 2007, the Spanish government issued several decrees that allowed renewable energy providers to sell 100% of their output to the grid at above-market prices. This "feed-in-tariff" regime made wind and solar power projects highly attractive, and by 2008 Spain had half the world's solar power generation capacity.

Unfortunately, the decrees did not fully consider the consequences. Among them was that because Spain's laws capped the cost of power for several consumer groups, the renewable energy projects soon received more money than could be recovered from consumers, resulting in a "tariff deficit" that had to be paid by the government. The financial crisis of 2008 proved too much, and in 2009 the government retroactively scaled back the feed-in-tariffs and capped the amount of solar power that could be installed.

The changes impacted not just companies with existing solar power plants in Spain, but also panel manufacturers who could no longer count on demand from Spain. That year, many solar panel makers, including Yingli, Renewable Energy Corp and Q Cells, saw significant declines in profits or large losses.

Spain's solar subsidy reductions were soon joined by Germany. The cuts further depressed demand, and many panel makers experienced financial difficulties.

The industry itself was already in oversupply because many solar panel makers were themselves also receiving subsidies that lowered their costs, whether via soft loans or outright grants. China was often blamed, but many governments provided their own champions with such aid. A Reuters article from 2012 put it thus: "Solar companies in Europe and the United States have been hit hard by a toxic mix of oversupply, falling prices, low-cost Asian competition and lower government subsidies."[18]

Some notable solar bankruptcies:

Company	Country	Bankruptcy
Solyndra	USA	2011
Q Cells	Germany	2012
REC Wafer	Norway	2012
Suntech Power	China	2014
LDK Solar	China	2014

But an investor whose main lesson from this fiasco is "avoid solar companies" has learnt the wrong lesson. The problem was not the solar industry *per se* but the massive *distortions* introduced by the subsidies. Inflating revenues for generation companies and depressing costs for panel manufacturers combined to make industry support both expensive and unsustainable. Once the tipping point was reached, both revenue and cost support were rolled back, with predictable consequences.

What other industries might be susceptible to such a rollback? An obvious one that comes to mind is electric vehicles (EVs). Made famous and desirable by Tesla, EVs currently cost too much to be competitive with mass-market gasoline-fueled cars.

Many governments provide indirect subsidies for EVs by giving consumers a tax credit upon purchase. The cost of such indirect subsidies is inherently limited because consumers cannot "make a profit" by purchasing multiple EVs, since the limit would be a 100% tax credit.

Problems arise when the government gives out direct cash subsidies. As with the solar industry, payments can quickly spiral out of control. In China, individuals receive subsidies for each "new energy vehicle" (NEV) that they **buy**, but commercial vehicle makers receive the subsidies for each NEV that they **sell**. This creates the temptation for commercial vehicle makers to over-report their sales, in order to inflate the subsidies they can collect. In 2016, the Chinese government fined 5 companies for NEV subsidy fraud amounting to RMB 1bn.

Subsidies aim to lower the effective cost and make NEVs competitive with conventional vehicles. However, this is a delicate balancing act. If subsidies are too low, companies do not bother with NEVs. If subsidies are too high, poor quality NEVs are rushed to market, resulting in oversupply and business failures.

China has experienced exactly the latter problem[19]. Of some 4,000 NEV models that received production permits, only one quarter made it into production. Among 200 NEV producers, only 140 actually launched models in the market.

Can EV investors learn something from the solar industry's experience with subsidies?

Take **BYD Company**. Made famous after Warren Buffett's Berkshire Hathaway bought a 10% stake in 2008, the company began as a battery assembler for mobile phones. Later the company expanded into handset assembly, and then into cars. In theory, BYD can leverage its experience in lithium-ion handset batteries to become strong in EV batteries too, and thus gain an edge over competitors whose expertise lies in conventional engines. So far, things have not quite gone according to plan.

First, for safety reasons, the company decided against using handset-type lithium cobalt oxide ($LiCoO_2$) battery chemistry in its EVs. It instead used a different chemistry, lithium ferrophosphate ($LiFePO_4$), and had to build up capabilities from scratch. Additionally, the company has announced it will adopt lithium nickel cobalt manganese (NCM) technology, so it will confront the manufacturing learning curve yet again.

Second, even with NEV grants, BYD's cars are still not competitive except in cities with license plate restrictions, such as Beijing,

[18] *Subsidy cuts will hamper Q-Cells' turnaround effort*, **Reuters**, 28 February 2012.

[19] *China fine-tunes its NEV subsidy scheme,* **Global Times**, 22 August 2016.

Shanghai, Guangzhou and Shenzhen. In these cities, car owners have to ballot for license plates before they can buy a car. Beijing uses a pure lottery, while Shanghai uses an auction. Guangzhou and Shenzhen allow the use of either method to get a plate.

NEVs are exempt from the normal ballot and are given a license plate free, so car buyers who choose NEVs not only save on license plate fees, but also bypass the balloting process. A free, guaranteed plate can be extremely valuable: in Shanghai, the success rate for license plate auctions is only 4%, and the winners pay an average of RMB 85,000, versus a 100% success rate and a free plate for NEVs. In Beijing there is no license plate fee, but the lottery success rate is less than 1%.

When the NEV grant is combined with savings on license plate fees, BYD's plug-in hybrid electric vehicles (PHEVs) can actually be cheaper than comparable conventional cars. So BYD has an edge, and its recent financial statements are impressive: for the first half of 2016, its automobile and related products segment had sales of RMB 23.4bn and operating profits of RMB 3.1bn. Total NEV sales were 49,000 units, valued at RMB 15.3bn. Battery-only EVs made up 22,000 units. BYD had a 17% share in BEVs and a 61% share in PHEVs. So things are going great for now.

The RMB 64bn question is: can BYD reduce its costs faster than the government reduces its NEV subsidies?

BYD's NEVs sold for an average of RMB 312,600. The NEV subsidy from the central government can reach RMB 60,000, while in Shenzhen the local government NEV subsidy is a 1:1 match yielding another RMB 60,000. License plates in Shenzhen cost about RMB 50,000, so the total subsidy value can reach RMB 170,000, enough to make BYD's RMB 312,600 NEV cheaper than a conventional car costing RMB 150,000.

But… nothing lasts forever. Already, in 2017 the NEV subsidies will decline to a maximum of RMB 44,000 for BEVs and RMB 24,000 for PHEVs, with further declines planned for 2019. This means that in 2016, in Shenzhen the subsidy will decline by RMB 32,000 for BEVs. If BYD cannot reduce costs fast enough, it will either have to lower its profit margins to stay competitive, or sell fewer NEVs and thus earn lower profits.

So far, BYD has managed to defy skeptics. It picked up another vote of confidence last July when Samsung paid US$455m for a 2% stake. But conservative investors might do well to be cautious amidst the numerous stamps of approval. As Warren Buffett himself warned in **Forbes**: *You Pay A Very High Price In The Stock Market For A Cheery Consensus*.

Buffett's article, written in the fear-stricken aftermath of Lehman Brothers' meltdown in 2008, was in fact *bullish* on the stock market at that time. It made the point that the depressed valuations then prevalent in the stock market meant that stocks were attractive investments. Now, in 2017, BYD's star is shining brightly, its future as a leader of China's NEV ambitions looks assured, and the stock seems priced accordingly. Perhaps, to invert the point of Buffett's article, now is not the best time to be a buyer of BYD stock.

To be clear, BYD is not the only beneficiary of government largesse. **Geely Automobile**, to cite another example, has received large grants and subsidies (not NEV related) over the years. From 2010 through 2015, direct government aid accounted for anywhere from 24% to 46% of pre-tax profits. In the first half of 2016, subsidies made up 23% of pre-tax profits. Anyone buying Geely on the basis of its profits should strip out the government aid, since future handouts are not guaranteed. Currently, Geely is popular with investors: the stock soared 76% in 2016, and it was recently added to Hong Kong's Hang Seng Index. It now trades at 31 times the previous 12 months' earnings. Excluding the government subsidies, the price/earnings ratio is 41 times.

In the short term, the index inclusion is likely to boost the stock further, as index funds and exchange traded funds add it to their holdings. In the longer term, investors should note that that new index members usually join indices at the peak of their valuations, when their market capitalizations and trading volumes are at historical highs. Such situations are highly mean-reverting, meaning that the new index members are likely to underperform in future. *Caveat investor*.

☙ End ❧

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%**

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.