



In this quarterly edition we review performance and attribution. In our headline stories, we cover Cochlear and Blackmores new infant formula. We take a look at electric cars, oil and credit rating agencies. We also comment on trends in central banking and “just-in-time” investing. Photo: “The Classic Panama” – neatly boxed.

## About Selector

We are a boutique fund manager with a combined experience of over 150 years. We believe in long-term wealth creation and building lasting relationships with our investors.

Our focus is stock selection. Our funds are high conviction, concentrated and index unaware. As a result, we have low turnover and produce tax effective returns.

We seek businesses with leadership qualities, run by competent management teams, underpinned by strong balance sheets and with a focus on capital management.

Dear Investor,

What started as a trickle, has turned into a torrent. We are referring to the new world of negative rates. Central bankers globally are embracing this new approach in a desperate attempt to kick start economic growth. In a historical sense this is new ground. Central bankers have often dealt with the opposite, controlling growth to drive down inflationary pressures. Today, it's all about fostering growth to avoid deflation. For a central bank, cutting rates to spur on an economy that is struggling is standard practice. Yet when this extends to imposing negative interest rates on funds deposited, the economic consequences are uncharted. With currency wars and counter moves by other central banks underway, an adjustment process is at hand.

It is therefore no surprise that stock markets are experiencing significant swings as macro factors including China, oil markets and weak global economic activity impacts investor confidence. On the flip side, opportunities will present themselves as markets re-price many businesses in fear of the near term outlook.

The recent reporting season allowed us to consider the investment case for each of our holdings as well as investigating new opportunities. A key theme that emerged centred on companies that are delivering and those that are not. The best management teams are driving top line growth despite the prevailing economic backdrop, while continuing to invest in new products, all without compromising their respective balance sheets.

These companies include the likes of **Cochlear, Domino's Pizza Enterprises, Treasury Wines, Sydney Airports, The Star Entertainment Group, Reece, Blackmores** and **SEEK**. In contrast, a raft of businesses appear ill prepared for this challenging environment. Some have resorted to cutting costs and pulling back on investing in an attempt to shore up earnings and reduce debt, especially in the resources sector. The message from management of operators such as **Worley Parsons** has clearly shifted to one of capital preservation and survival. No doubt some of these damaged businesses provide share price upside should circumstances change, however, our approach will continue to assess each on their individual merits, with a particular emphasis on management culture and financial strength.

In this edition we profile our thoughts on the emergence of the electric car, the role of credit rating agencies, the rather novel concept of what we term just-in-time investing and re-visit global implant leader Cochlear. We also compare baby formula's produced by Blackmores amongst others, chart the history of oil and take a look at the evolution of central bank communication.

For the March 2016 quarter the Fund delivered a gross negative return of **0.34%**, and a gross positive gain of **17.17%** for the current financial year to date. In contrast the All Ordinaries Accumulation Index has delivered negative returns of **2.35%** and **1.92%** over the same period. We trust you find the report informative.

Regards,

Selector Investment Team

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### **Quote: Peter Lynch, former Fidelity Investments Portfolio Manager**

*“Everyone has the brainpower to make money in stocks. Not everyone has the stomach. If you are susceptible to selling everything in a panic, you ought to avoid stocks and mutual funds altogether.”*

## Performance March 2016

For the quarter ending March 2016, the Fund delivered a gross negative return of **0.34%** as compared with the **2.35%** fall in the All Ordinaries Accumulation Index. Performance statistics are detailed on page 40.

### Performance table since inception

Returns	Gross Fund Return %	All Ordinaries Accumulation Index %	All Ordinaries Index %
3 Months	-0.34	-2.35	-3.61
6 Months	11.53	4.11	1.84
1 Year	7.36	-8.05	-12.11
3 Years annualised	19.90	5.63	1.14
5 Years annualised	16.33	5.43	0.89
10 Years annualised	8.10	4.50	0.13
Since Inception annualised	12.00	7.19	2.73

### Fund's Top 10 holdings

Top 10 March 2016*	Top 10 December 2015*
ALTium	ALTium
ARISTOCRAT	ARISTOCRAT LEISURE
BLACKMORES	BLACKMORES
CSL	CSL
FLIGHT CENTRE TRAVEL GROUP	FLIGHT CENTRE TRAVEL GROUP
OZFOREX GROUP	OZFOREX GROUP
RESMED	RESMED
SEEK	SEEK
SIRTEX MEDICAL	SIRTEX MEDICAL
TECHNOLOGY ONE	TECHNOLOGY ONE
<b>Top 10: 45.22%</b>	<b>Top 10: 46.99%</b>

\* Listed in alphabetical order

Selector employs a high conviction, index unaware, stock selection investment strategy, which typically targets 15-25 stocks for the Fund. As shown above, the Fund's top 10 positions usually represent a high percentage of its equity exposure. Current and past portfolio composition has historically been very unlike that of your average "run-of-the-mill index hugging" fund manager. Our goal remains focused on truly differentiated broad-cap businesses rather than the closet index hugging portfolios offered by most large fund managers.

*Performance attribution for the March 2016 quarter*

Top 5	Contribution	Bottom 5	Contribution
ALTIVUM	1.25%	OZFOREX GROUP	-1.93%
IRESS	0.62%	SIRTEX MEDICAL	-1.37%
FLIGHT CENTRE TRAVEL GROUP	0.45%	BLACKMORES	-0.89%
THE STAR ENTERTAINMENT GROUP	0.42%	INFOMEDIA	-0.44%
SIMS METAL MANAGEMENT	0.37%	COMPUTERSHARE	-0.38%

*Top Contributors***1. ALTIVUM (ASX: ALU)**

Printed circuit board design software group Altium remains on track to substantially grow sales and earnings, as management continues its pursuit of global market share leadership. We reviewed the Altium investment case in our December 2014 quarterly newsletter and the recent half year 2016 result confirmed that the group's business strategy and financial aspirations remain on track. Most pleasing has been the strong growth achieved in the U.S. region which delivered revenue up 25% to US \$18.4 million, while the EMEA region appears back on track following a 18% rise in revenues to €14.0 million. CEO Aram Mirkazemi noted the achievements and aspirations commenting, *"Altium's financial performance over the first half positions the company well to achieve its full year objectives of double digit revenue and sales growth and to reach an EBITDA margin that enters into the 30's. The first half result also confirm that the company is on track to achieve its goal of \$100 million revenue by 2017 (from organic growth alone) and is on course to realise market leadership in the PCB software design by 2020."* We are planning to visit the group's U.S. operations during April.

**2. IRESS (ASX: IRE)**

Financial data services group IRESS delivered a solid 2015 full year result, with group sales up 10% to \$361 million, giving rise to operating profits of \$119 million. The resilient Australian financial markets business continues to underpin the group's endeavours in wealth management. Never one to over promise or promote, IRESS CEO Andrew Walsh summed up the past year, *"This is a solid result and reflects strong performance in the United Kingdom, Australia, New Zealand and South Africa, particularly in the second half. IRESS financial performance during 2015 was underpinned by quality, predictable revenue and supported by focused delivery to new and existing clients. During 2015, the business achieved a number of significant client wins and product milestones. Our investment program in prior periods is delivering strong outcomes for IRESS and our clients, and we expect this will continue in 2016. As an international vendor of scale, we are uniquely positioned to continue to meet the needs of a broad range of financial service participants."* We remain positive on the internal business developments underway and the industry dynamics that support the group's endeavours.

**3. FLIGHT CENTRE TRAVEL GROUP (ASX: FLT)**

Global travel operator Flight Centre Travel Group achieved a solid first half result, in what the company describes as "challenging trading conditions". For the period the group delivered

record global ticket sales, with total transaction value (TTV) rising by a record \$1.0 billion to \$9.2 billion or 13%. Operating revenue rose 15% to \$1.3 billion with margins improving to 13.8%, while underlying net profit reflected the group's stepped up investment program, rising 5.4% to \$106 million. Management continues to roll out significant product initiatives, illustrative of a business that reinvests to grow future earnings. CEO Graham Turner summed up the latest half noting, *"Importantly, we have maintained an exceptionally strong balance sheet, while acquiring businesses to fast track our growth in key sectors, and made significant strategic progress."* To this end, the group ended the half with net cash of \$409 million, an increased interim dividend of 60 cents per share, up 9% as well as re-confirming the full year operating earnings guidance range of \$380-\$395 million.

#### **4. THE STAR ENTERTAINMENT GROUP (ASX: SGR)**

Gaming operator Star Entertainment Group posted a strong half year result, reflecting the successful execution of a number of strategic priorities. Importantly, management have focused on the basics, driven by a targeted marketing campaign, with an emphasis on cost control. At the headline level, group earnings were impacted by a low win-rate in the International VIP Rebate business. As a consequence, reported profits were down to \$60.7 million, while normalised profits were up 26% to \$142 million. Despite the lower cash flow, resulting from a low win rate, the level of normalised profits does illustrate what can be expected under a more historical VIP win-rate outcome. Importantly, a closer look at some of the operational outcomes at the flagship Star Sydney casino, is illustrative of the gains being achieved, with domestic table revenues up 12.3% and slot revenues rising 7.4%. The group also reached contractual close on the Queen's Wharf Brisbane project and along with a net debt position of \$504 million, is well placed to undertake this and a number of significant capital projects both in Sydney and the Gold Coast. Management noted that second half trading had remained consistent with the first half, although some impact could be expected from building works under way. We provided a brief review in our December 2015 Quarterly Newsletter on our positive stance towards the business, a view that remains in place.

#### **5. SIMS METAL MANAGEMENT (ASX: SGM)**

A rebound in metal prices during the period assisted investor sentiment following a disappointing first half update. Management have responded to weak scrap metal prices, undertaking a series of business initiatives to combat the ongoing contraction within the industry. As we noted in our December 2015 quarterly update, the challenging business environment has seen the group resetting its 2018 financial targets towards a minimum return on capital target of 10%. This would see the company deliver full year net earnings of over \$200 million and is in contrast to the breakeven result delivered in the first half. With a net cash position of \$373 and a 10% share buyback program now underway, management is expressing confidence that the worst may be behind the group. Certainly, the steps taken thus far to lower the business cost base while retaining the scrap volume capacity upside should conditions improve underscores the potential that exists. Notwithstanding the difficult business environment, we remain attracted to the business fundamentals.

### *Bottom Contributors*

#### **1. OZFOREX CROUP (ASX: OFX)**

Online money services bureau OzForex Group confirmed that takeover discussions with Western Union had ceased after it became clear Western Union would not submit a binding proposal. Despite providing exclusive access for due diligence after receiving an indicative bid of \$3.50 to \$3.70 per share, OFX management terminated talks that began in November 2015. These events, once again, illustrate the danger of corporates providing access for due diligence with no obvious benefit should a deal not eventuate. The company also noted softer trading in the third quarter ending December, as the group progresses through its rebranding exercise. Guidance for the full year ending March 2016 is now for underlying EBITDA to be in the range of \$35-\$37 million compared with earlier expectations of \$38.5-\$40.5 million. Takeovers are difficult to judge at the best of times but the actions of Western Union are somewhat surprising. Despite the earnings slowdown in the recent quarter we continue to see merit in both the company's long term strategy and market positioning.

#### **2. SIRTEX MEDICAL (ASX: SRX)**

Medical device group Sirtex Medical's first half result fell short of market expectations, despite delivering record dose sales up 15.7% to 5,728. With the company targeting unit growth of 20% for the full year, a stronger second half is now required, a figure that remains achievable according to CEO Gliman Wong, *"I am pleased with our record first half profit result which reflects the significant progress we have made in continuing to grow the business. The first half result is consistent with our dose sales objectives for the full year."* Sales revenue hit \$113 million, up 40%, while net profits rose 47% to \$26 million. Net cash stood at \$74 million, underpinning the group's strong financial position. Significantly, the company also informed investors that the study data from the group's recently completed SIRQLOX trial had been published in the Journal of Clinical Oncology on 23 February 2016, while a positive reimbursement decision was received for the Netherlands market. Offsetting these positive developments has been the group's American President, Mike Mangano's decision to leave the company in June after having served the business for the past six years. Despite this setback we expect growing awareness within the medical community will continue to underpin market demand for the company's medical device.

#### **3. BLACKMORES (ASX: BKL)**

On the back of an excellent first half result investor scrutiny continues to surround the group's growing Chinese market opportunity. Having discussed the long term business case in our December 2014 Quarterly Newsletter, the group finished the half strongly, with sales up 65% to \$341 million and net profits jumping 160% to \$48 million. The Board lifted dividends by 194% to \$2.00 per share, with the company finishing the period in a net cash position. While there is no denying the significant benefit the Chinese consumer is having on the business, management continues to invest in both infrastructure and brand positioning across multiple geographical locations. Over the medium term, group sales of \$1.0 billion and net profits of \$150 million are now seen as a realistic target, which would give rise to earnings per share of \$8.60 per share.



**4. INFOMEDIA (ASX: IFM)**

A subdued profit result and the confirmation of the loss of an important electronic parts catalogue (EPC) contract with Jaguar Land Rover from the end of December 2017, added to the uncertainty that has impacted the group since forced management changes took place in August 2015. The subsequent appointments of new CEO Jonathan Rubinsztein and CFO Richard Leon, who has recently returned to Australia, having undertaken a similar role at listed group Altium, provides confidence that attention can now return to driving greater adoption of the company's key product offerings of Microcat EPC and Superservice Menus. With a current market capitalisation of less than \$200 million, the company's undemanding financial metrics and net cash position underpins our confidence of the inherent value now on offer.

## Just-in-time investing

The buy and hold approach to investing appears to have changed over the past three decades, illustrated by an increasing propensity to limit market exposure at any given point. In some respects, investors appear to have something in common with modern day manufacturing practices.

Just-in-time (JIT) manufacturing is a production model in which items are created to meet demand, not created in surplus or in advance of need. The purpose of JIT production is to avoid the waste associated with overproduction, waiting and excess inventory, which represents three of the seven waste categories defined in the Toyota Production System, also known in North America as the lean production model. The JIT concept was described by Henry Ford in his 1923 book, *My Life and Work*:

*"We have found in buying materials that it is not worthwhile to buy for other than immediate needs. We buy only enough to fit into the plan of production, taking into consideration the state of transportation at the time. If transportation were perfect and an even flow of materials could be assured, it would not be necessary to carry any stock whatsoever. The carloads of raw materials would arrive on schedule and in the planned order and amounts, and go from the railway cars into production. That would save a great deal of money, for it would give a very rapid turnover and thus decrease the amount of money tied up in materials."*

In the global financial arena, investors are adopting an attitude not dissimilar to what has occurred in manufacturing. An approach that aims to limit market exposure at any given point by means of using hedging or derivative type products. The growing use of Exchange-Traded Funds<sup>1</sup> (ETF) and managers that apply long-short hedge fund strategies are popular because the inference is they provide better capital protection, ease of use and convenience in entering and exiting markets.

In the case of market neutral funds, the manager's primary objective is to maintain a neutral exposure to the overall market by maintaining an equal weight of both long (stocks that are owned, with the expectation that its value will rise) and short (stocks that are borrowed and sold, with view of buying them back for a lower price and returning them to the lender) positions. Again the inference here is that investors are carrying less exposure should markets fall away but are well positioned to benefit on any rise. Some would call this a win-win scenario. We would differ.

During times of heightened market volatility investors naturally gravitate towards these offerings, a trend that has grown in popularity over recent years. The oil price rout and market turmoil in China illustrate perfectly the economic challenges that investors now perceive. This has allowed the proliferation of what we would call just-in-time investing. The practice of buying in at just the right time and exiting at just the right time.

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<sup>1</sup> An exchange-traded fund (ETF) is an investment fund traded on stock exchanges in a similar fashion to ordinary shares. Most ETF's track an index, such as a stock index or commodities by way of example. Wikipedia notes that since its introduction in the U.S in 1993, more than USD2 trillion have been invested in ETF's.

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All this makes perfectly good sense in theory but fails to take into account that most investors are not emotionally suited for investing in share markets in the first place. Investing is a process of putting capital at risk. The twin aims of this endeavour are to make money on the original capital outlaid by way of capital appreciation, accompanied by a growing income stream where possible. Investors who are not comfortable with significant fluctuations brought about by daily share price movements run the risk of buying in or selling out at precisely the wrong time.

Hence the rise of alternative products, aimed to tap into a market audience that wants fast exposure and a fast exit just in case things turn nasty. But as the International Monetary Fund (IMF) Zhu Min noted the real concern is how quickly market liquidity dries up when everyone heads for the exits at the same time, *“The key issue is that liquidity could drop dramatically, and that scares everyone. If everybody is moving together we don’t have any liquidity at all. We have to be ready to act very fast.”*

Obviously, no investor starts with the intention of losing capital, however, the focus should be on protecting against permanent capital loss rather than market gyrations that lead to temporary losses. Protecting against loss and moving quickly if need be is sensible but only when an individual has the right temperament and mind set to actually be a long-term investor. **SFM**

## Credit rating agencies – the blind leading the blind

The rating agencies are an intriguing lot. They are incredibly good at arriving late to most trends. Take for instance the U.S. credit fuelled housing boom that effectively set in train the global financial crisis. Having provided the major U.S. investment banks with the necessary accreditation to sell mortgage backed securities, the rating agencies stayed the course despite the growing body of evidence that pointed to increasing levels of borrower defaults, which culminated in the banking collapses of 2008.

The analogy that we would use is being told that it is perfectly safe to cross the railway lines between certain hours when trains are increasingly breaking the time curfew. Despite the growing number of near miss incidents, authorities only reaction would be to wait and only move into action when the increasing number of fatalities leaves them with little choice.

Unfortunately rating agencies are hopelessly conflicted in their duties. They are often paid by the very people they are meant to rate. Investors are led to believe one thing, only to be blindsided by a one hundred and eighty-degree change in opinion. This is being played out in the oil industry, upon which billions of dollars' worth of credit ratings now hinge.

Up until very recently both Standard & Poor's (S&P) and Moody's oil prices assumptions would have been the basis upon which the major oil and gas operators would have modelled their credit financing, with the implicit aim of remaining within a stated rating. Investors in turn would have taken comfort from management that the firm's credit rating was sound, with little need for additional equity.

During January the rating agencies saw fit to slash oil price assumptions for Brent crude oil to USD33 per barrel, thereby jeopardising the creditworthiness of many energy producers and operators, including local players Santos, Origin Energy and BHP Billiton. The new oil prices adopted by both the major agencies simply mirrors what is currently happening in the market but the repercussions of their actions are being felt far and wide.

Most notably the world's largest miner BHP Billiton had its corporate paper lowered by S&P from A+ to A during February. Underlying the significance of this move and despite the company clinging to its cherished "A" ranking, S&P's actions represented the first cut by the agency in seventeen years. In the process, the company's much heralded progressive dividend payment policy was publicly exposed by the rating agencies, suggesting a further cut was on the cards should the group proceed with its stated dividend aims.

This episode highlights the folly of a business so exposed to the commodities cycle and where it has limited control of its own financial outcomes. To then pile on significant debt commitments that are at the whim of credit rating agencies, should bring into question the role of all parties.

In the case of BHP, the question of whether it would pay a progressive dividend, was no longer a decision that the company's board would make. It's all well and good for management to state that, *"BHP Billiton has the strongest credit rating in the sector and remains committed to maintaining its strong balance sheet through the cycle."*

The truth is irrespective of how strong or how well positioned the group is to its peers, the decision in this instance had already been made for them. Like most businesses that find themselves in a tighter financial position, those that hold the power are the bankers or in this instance the likes of Moody's and S&P. So much for long term planning. **SFM**

## Cochlear (ASX: COH)

We have been on a journey with Cochlear, the global leader in bionic hearing implants. It started back in 2004 when we first saw fit to add the company to our portfolio, at what we considered a knock down average price of \$26 per share. Just prior to our initial investment the business had enjoyed hero status among the investment community, having consistently delivered 20% plus growth rates since first listing in 1995, at the then issue price of \$2.50 per share.

But then it all stopped. Management hit a speed bump in 2004, with implant unit sales flat and operating profits taking a hit from a restructure that also saw the instalment of a new CEO Chris Roberts.

In our December 2010 Selector Quarterly Newsletter (available online) we outlined the company's business profile as we reflected back on the journey thus far and asked what the future may bring. Suffice to say that it didn't take long for our assumptions to be sorely tested to the downside. A damaging product recall in 2011 put into question the company's most cherished status, that of product reliability. To management's credit, their response to the crisis was exemplary and whilst corporate damage was inflicted over the interim period, the long term lessons learnt from that near failure put in train necessary changes and safeguards. It did not, however, impede the essence of what Cochlear delivers, which for the profoundly impaired, is the ability to hear.

Over CEO Roberts' tenure, the manufacturing base evolved from what one could loosely term a cottage industry to one now regarded as a state of the art facility, housed in the grounds of Macquarie University's hearing precinct. New production techniques along the lines of LEAN manufacturing were introduced to position the company for significant growth in implant volumes, whilst research and development funding continued to deliver new products and accessories.

Suffice to say the past few years have been tough. The 2011 product recall and subsequent competitor response tested the board, management and the company's brand credentials. Not surprisingly analysts continue to ask the same question, year in year out. What is the growth rate of implants and are the days of 20% growth long gone? It's simply human nature for investors to only stick around in the good times, however, trying to accurately time a re-entry is in itself fraught with risk.

More importantly the steps undertaken during these difficult years were sensible and set in train a powerful platform for future growth.

These measures included lowering the level of dividend payments to reflect the lower earnings the company was experiencing. Unlike some of our miners who have until recently insisted on paying progressive dividends, almost divorced from economic reality, Cochlear's approach was to adjust accordingly.

The group's transition also included the passing of the CEO baton to Chris Smith, the company's former U.S. President. Along with outgoing Roberts, Smith has been with the

organisation for over a decade and his elevation to the top job has been both smooth and a continuation of the company's philosophy, although with a greater emphasis on sales, consumer awareness and broadening product reach geographically.

The 2016 half year update saw CEO Smith provide his first financial results presentation to the investment community, one that reflected on the strategic platforms to grow the business. At its core the focus is squarely centred on the consumer both in a pre-surgery and post-surgery setting. The message is very much about utilising the company's dominant market share position, estimated at two to three times greater than its nearest competitor, to further improve market awareness, expand product indications and identify and nurture new referral channels.

With an existing installed base of over 440,000 implant recipients the group's Services business, which comprises new implant upgrade products and accessories, is an important and growing earnings segment. During the half, revenues related to the sale of cochlear implant units rose 34% to \$363 million, while the Services business revenues grew 31% to \$146 million. Management have identified recipient engagement as a core focus, noting that those that are kept abreast of developments are three to four times more likely to act. This is very much about the company addressing the central issue surrounding profound hearing loss, consumer awareness.

Today, the business is directly represented in twenty countries, employing some 2,800 people with turnover in 2016 set to top \$1.0 billion for the first time. The U.S. operation leads with 46% of sales, followed by Europe, Middle East and Africa with 36% and Asia Pacific making up the balance at 18%.

Management's direct-to-consumer marketing approach supported by field sales expansion is driving an acceleration in sales, underpinned by product innovation including the market's only "true wireless" implants.

### Company Results Summary

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Cochlear implant system sales (units)	26,838	25,997	26,674	23,087	24,661	21,023	18,553	18,228	15,947	12,901
Total revenue (\$million)	925.6	804.9	752.7	779.0	809.6	734.8	694.7	601.7	559.4	452.3
R&D expenses (\$million)	128.0	127.6	124.7	119.3	108.9	94.9	96.7	80.0	65.9	56.7
Net profit after tax (NPAT) (\$million)	145.8	93.7	132.6	56.8	180.1	155.2	130.5	115.2	100.1	80.0
EBITDA (\$million)	236.7	176.5 <sup>2</sup>	201.9	239.4 <sup>1</sup>	270.1	243.6	205.5	193.3	170.9	130.2
EBIT (\$million)	206.4	149.6 <sup>2</sup>	178.9	215.3 <sup>1</sup>	242.7	220.5	183.3	167.3	150.2	111.5
NPAT (\$million)	145.8	109.5 <sup>2</sup>	132.6	158.1 <sup>1</sup>	180.1	155.2	130.5	115.2	100.1	80.0
Basic EPS (cents)	256.1	164.6	233.0	100.0	318.2	275.7	233.7	208.1	182.9	146.8
Dividends per share (cents)	190.0	254.0	252.0	245.0	225.0	200.0	175.0	150.0	125.0	100.0
Closing share price as at 30 June (\$)	80.15	61.70	61.71	65.84	72.00	74.32	57.70	43.65	61.00	54.63
Market capitalisation as at 30 June (\$million)	4,565	3,513	3,512	3,744	4,081	4,198	3,230	2,423	3,341	2,985
Number of permanent employees	2,632	2,536	2,531	2,390	2,319	2,006	1,888	1,789	1,655	1,100

1. Excludes product recall costs of \$138.8 million before tax and \$101.3 million after tax.

2. Excludes patent dispute provision of \$22.5 million before tax and \$15.8 million after tax.

Source: Cochlear Limited Annual Report

The progress made thus far and the momentum now evident positions Cochlear to reap what Smith describes as follows: *"The hearing loss market offers an incredible business opportunity, with over 360 million people experiencing disabling hearing loss, with nearly one in three people over the age of 65 affected by hearing loss. With global market penetration for implantable hearing solutions less than 5%, there remains a significant, unmet and addressable clinical need that will continue to underpin the long-term sustainable growth of our business."*

Five years on since we first took a deep dive into the Cochlear business, the legacy issues have been firmly put to bed, allowing CEO Smith a clear path to expand the group's global footprint.

In a refreshing development, the company is undertaking its first investor day during April, perhaps reflecting CEO Smith's desire to increase shareholder's understanding of the business. From our vantage point we would argue that the company's best years are still ahead. **SFM**



## Blackmores Newborn Infant Formula

Although most babies (96%) in Australia are initially breastfed, only 39% of infants are exclusively breastfed to around 4 months, and 15% to around 6 months, the recommended period. (AIHW 2012. Australia's health 2012. Australia's health no. 13. Cat. no. AUS 156. Canberra)

Despite the Australian National Breastfeeding Strategy (2010-2015) appearing to improve these statistics (report still to be published), there are a large number of babies still requiring supplemental nutrition in the first 6 months of life and beyond. Approximately 300,000 babies are born in Australia each year.

New mothers are highly motivated consumers willing to research and network to make the best decision for their baby. They will be open to a trusted and known brand, however will always question,

- a) price point and
- b) If baby is happy (feeding, sleeping and growing well, showing no digestive discomfort or bowel difficulties).

Given the strict Australian and New Zealand infant formula regulations, it is not surprising that the newly released Blackmores Newborn Formula looks very much like its competitors on first glance. Standard amounts of fat, protein, energy, vitamins, minerals, antioxidants and nucleotides are present.

However, three nutritional strengths and differences are noted on closer inspection:

1. Blackmores Advisory Hotline states the formula's first advantage is that it is derived from a **known, clean source**. The cows are pasture/grass fed and the formula is manufactured close to the source. The whey: casein ratio is the same as that found in early breast milk, in line with its competitors.
2. This formula contains a **prebiotic** called GOS (galacto-oligosaccharide), which encourages the growth of *probiotics* when present in the intestines. It is widely acknowledged that the intestinal 'biome' (probiotic population) has an essential role to play in the growth and health of a child. Low levels of GOS in infant formula may improve stool frequency, decrease faecal pH, and stimulate intestinal bifidobacteria and lactobacilli up to levels comparable to breast-fed infants. Karicare and Nutricia Aptamil Gold+ infant formula also contain GOS so this is not an exclusive.
3. This formula, according to Blackmores, utilises the **fatty acids** from palmitic acid (from sustainably sourced palm oil). These have undergone enzymatic esterification to make the structure very similar to breast milk, thus improving absorption. It may also improve calcium absorption and improve stool frequency. To date, the proprietary method has not been identified but may be worth investigating further.

### Comparison with similar products



#### 1. Bellamy's Organic Infant Formula

Mothers purchase Bellamy's Organic Formula due to its organic status rather than any other nutritional strength.

The Blackmores Formula, whilst not certified organic, carries the benefit of a known and 'clean' Australian source of the milk-derived ingredients.

The Blackmores Formula is a nutritional improvement on the Bellamy's Organic Formula due to the inclusion of:

- i. Nucleotides (non-protein nitrogenous compounds found in high concentrations in breast milk that are important for the healthy growth of the baby)
- ii. GOS (prebiotic) – mentioned above
- iii. The essential fatty acids Arachidonic acid (ADA) and Docosahexaenoic Acid (DHA) (essential ingredients for brain development).

Whilst both utilize palmitic acid from sustainable palm oil sources, it is difficult to determine the difference in:

- a) The source of the palm oil and
- b) The extraction / processing method.

#### 2. Karicare+ Infant Formula

Blackmores Infant formula is very similar to the Karicare+ Infant Formula in nutritional profile, and they both contain GOS.

Notable differences include:

- i. The Blackmores product has 15% more DHA and AA per serve
- ii. The Blackmore product contains lutein (a nutrient necessary for eye health)
- iii. The Karicare product does not contain the nucleotides.

### 3. S26 Original Newborn

Once again, the vitamin and mineral profile is very similar.

The Blackmores product has the advantage of:

- i. The additional ADA and DHA
- ii. The additional GOS
- iii. The additional lutein.

### 4. Nutricia Aptamil Gold+

This product is the most comparable, with all ingredients present, aside from lutein.

The Aptamil Gold + contains 40% more ADA and DHA which is significant. The ingredients list does not disclose the amount of Linoleic and Linolenic acid, which are also essential fatty acids.

Nutricia Aptamil Gold + has a solid foundation of research and consumer trust. Given the range has options for babies with reflux and allergy, it is often seen as the product least likely to cause digestive distress, one of new mother's greatest concerns. **SFM**

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## Electric Vehicles

The automobile was undoubtedly one of the most important technological innovations of the 20<sup>th</sup> century. It revolutionised industry and society, making transportation accessible, ubiquitous and the lifeblood of the global economy.

Of the 1.1 billion automobiles registered worldwide, the majority are powered by internal combustion engines (ICE) that run on petrol, diesel or gas. Automobile transport consumes just less than half of the 90 billion barrels per day of total oil consumption. The beauty of hydrocarbon fuels is that they are an easy to store, transportable energy source which can be readily converted to power with the aid of an ICE. Oil's properties have enabled the proliferation of automobiles.



*Tesla Model 3*

### The headwinds fossil fuels face

In the June 2014 Selector Quarterly Newsletter we discussed the threats that renewable energy generation such as solar, wind and hydro power pose to traditional generation such as coal, oil and gas. Many countries are rapidly moving down the path towards a renewable power generation future. Australia, Germany and the U.S. already generate a substantial portion of their energy from renewables. Replacing ICE vehicles with a practical and cost competitive alternative is tricky but one of the most promising developments appears to be electric vehicles powered by batteries. These vehicles can be recharged using electricity from the grid, which gives rise to the potential for renewable energy powered automotive transport. One company leading the charge in this arena is Tesla.

### Tesla

Tesla was founded by Elon Musk who was also the co-founder of the revolutionary online payments system PayPal. Musk believes that oil is a finite resource and that global consumption patterns are doing irreparable damage to the environment. Musk is a maverick

and Tesla is seeking to change global behaviour. While Musk's views may appear extreme, it underlines his personal goal of shifting the world's fuel consumption patterns away from oil.

He also knows that if electric vehicles are to be adopted by the masses they be competitive with ICE cars. Tesla are sketching a path for the technology to achieve both cost and convenience equivalence.

Their early strategy was to appeal to a niche luxury consumer, an early adopter who could afford the premium price tag, while tolerating some compromise, for cutting edge technology. The Model 3 proposes to change the demographic to the masses.

The key to the electric vehicle is the lithium-ion battery pack. It is made of batteries similar to those found in your mobile phone. They remain expensive and heavy when combined in a configuration large enough to power an electric car over the average distances required by daily commuters accustomed to an ICE car.

The substantial price differential between the Model S and Model 3 suggests the cost of the technology in electric vehicles is falling. In fact, Lithium-ion battery production costs have fallen rapidly over the last 10 years, having more than halved in the last five. However, they still account for a substantial proportion of Model S input costs.

Tesla has indicated they expect to begin production of the Model 3 in 2018. The Model 3 is slated to sell for USD \$35,000. Grid power is 70-80% cheaper than petrol on a per kilometre basis and electric vehicles have only a few moving parts which require less servicing. When the lower operating costs of an electric vehicle are taken into account, the comparable price tag looks more like USD \$25,000.

In addition, Tesla hopes to have their "GigaFactory" online just in time for the Model 3 to enter production. This plant is targeting a Lithium-ion battery run rate of 500,000 units per annum to meet the projected demand for the Model 3. This could deliver an additional 30% reduction in battery costs.

An inflexion point will be reached when electric vehicles become more efficient, more powerful, more convenient and more reliable. Musk believes the Model 3 will go close to achieving his goal.

Tesla's success to date with both electric vehicles and marketing hype has forced the hand of a number of the incumbent automotive manufacturers. General Motors have committed sizeable resources to developing electric vehicles. Their Chevy Volt, for example, is battery powered with an auxiliary ICE engine. Other car manufacturers have also mobilised significant resources to the same cause. Increased R&D in this space will undoubtedly contribute to the development of the technology and costs will come down as a result. This is not a race where the winner takes all.

### Electric vehicles and their implications

Electric motors convert more than 90% of stored energy into movement but need to be charged by a grid power. Generators that provide electricity to the grid tend to convert roughly 33% of the energy of the fuel they consume. This means that 30% of the energy used to power a battery electric vehicle is actually converted into motion. In contrast an ICE convert only 25% of the energy stored in fuel to motion. The upshot is that electric vehicles convert 5% more power from the source. They are 20% more efficient.

Until now, oil based hydrocarbons have represented the only transportable fuel source that can be stored safely and efficiently. That battery power is set to change this has broader implications beyond the automotive industry. As discussed in the June 2014 Selector Quarterly Newsletter, cost effective storage for household consumption will give power generation such as solar and wind a big leg up against traditional power generation.

With transportation accounting for just under half of the 90 billion barrels of global daily oil consumption and with most forecasters expecting long term demand growth, the possibility of overestimating oil consumption in the face of battery power cars seems relatively high.

On the flip side, energy retailers and networks could experience an energy renaissance, as the demand for power shifts from oil consumption to grid sourced power. **SFM**

## The Prize – Book Review

"The Prize" by Daniel Yergin, Pulitzer prize winner, profiles the history of oil and its impact on economies and the geopolitical landscape over the past two centuries. It is a fascinating read that traces the birth of Standard Oil, founded by John D. Rockefeller in 1870, which in turn, when forced to dismantle in 1911 by the U.S Administration gives rise to 33 smaller companies, many of which have become today's oil majors, including Chevron, ExxonMobil and BP.

The profile of oil throughout the decades is reflective of most commodities, driven by the economics of demand and supply, although it was the rise of the automobile industry that gave greater impetus for new oil exploration activities. Such was the concern that the director of the United States Bureau of Mines predicted in 1919 that *"within the next two to five years the oil fields of this country will reach their maximum production, and from that time on we will face an ever increasing decline."*

The following historical time-line provides a reference point to major events that have shaped oil's progress. It goes without saying that the most recent oil price collapse is but another chapter to be added to the long list of oil crisis. And whereas the rising popularity of automobiles from the 1920's onwards underpinned the surge in oil demand, this time round it may be its undoing, as electric cars begin to have an impact. If history is any guide, one thing is very clear, determining the outlook for oil is never a straight forward exercise.

### A timeline of oil

Period	Key Events
1854	Investor George Bissell engaged Yale University Professor Benjamin Silliman Jnr to analyse the properties of rock oil as both an illuminant and lubricant.
1855	Silliman's report confirmed the potential of rock oil, supporting the establishment of the Pennsylvania Rock Oil Company.
1859	Edward Drake, given the task of finding oil, hits success in Titusville Pennsylvania and sets in train the beginning of the oil boom.
1865	John D. Rockefeller bought out his oil refinery business partner Maurice Clark, ultimately forming a new venture, the Standard Oil Company in 1870. The name chosen for the company was to indicate a "standard quality of product" that the consumer could depend on.
1873	Russian government abolished the monopoly system, opening the region to private enterprise, a decision that saw the Noble family enter the Russian oil business. As a consequence, by 1884 the country's oil production rose to 10.8 million barrels compared with 600,000 a decade earlier, equivalent to almost a third of America's production.
1879	Standard Oil's strategy to profit from refinery and oil infrastructure ownership was achieved with the company controlling 90% of America's refining capacity.
1882	The Standard Oil Trust Agreement was signed amid growing resentment towards the company's monopoly position, with J.D. Rockefeller the largest shareholder controlling 27% of trust shares.



Period	Key Events
1885	The Rothschild family entered the Russian oil business providing essential finance to complete the country's railroad infrastructure and becoming, in time, the second largest Russian oil group.
1885	Royal Dutch discovers oil in Sumatra.
1888	Standard Oil entered the oil production industry and became responsible for a quarter of America's total output of crude oil by 1891.
1892	In 1869 the Suez Canal was opened for vessels, knocking four thousand miles off the journey to the Far East. In 1892 Marcus Samuel gained approval to send oil ships through the Suez Canal for the first time based on his new designs, with the Murex being the first. This marked the beginning of Shell.
1896	Henry Ford built his first car.
1901	Oil fever took hold in America following the discovery of crude in Texas at the Lucas 1 Spindletop well, flowing at 75,000 barrels per day. This discovery, with its huge volumes, not only opened up the southwest region for further exploration but also prompted a host of industries to shift their energy consumption from coal to oil. The success at Spindletop drew others to the region and led to the forming of companies including Sun, Texaco and Gulf.
1901	With Control over half of the Russian and Far Eastern oil exports and to protect against the competitive forces of Standard Oil, Shell and Royal Dutch agreed to amalgamate. In 1907 the union was officially forged with the emergence of the Royal Dutch Shell Group.
1906	The Roosevelt Administration brought a law suit against Standard Oil, charging it under the Sherman Act of 1890 with conspiring to restrain trade. Under duress to act, the company announces plans to dismantle itself in July 1911. Divided into several entities, they became known as Standard Oil of New Jersey (with approximately half of the total net value before becoming Exxon), Standard Oil of New York (with 9% of net value and later to become Mobil), Standard Oil (California) which eventually became Chevron, Standard Oil of Ohio which became Sohio and then the American arm of BP, Standard Oil of Indiana which became Amoco, Continental Oil which became Conoco and Atlantic which became part of ARCO and eventually Sun.
1908	William Knox D'Arcy, working alongside investor Burmah Oil of London, arrives in Persia in 1901 (or Iran as it would become known from 1935 onwards) in the pursuit of oil. In 1908, seven years after the Concession Syndicate was signed by the Shan, the group strikes success at Masjid-I-Suleiman (150 miles northeast of Basra). It would ultimately lead to the establishment of Anglo-Persian Oil Company, which established it as a significant producer and later became known as British Petroleum or BP.
1910	Oil was discovered in Mexico, beginning with the Potrero del Lano 4 well, flowing at 110,000 barrels per day and was considered the biggest oil well in the world. A boom in exploration and production followed, centring along the region that became known as the "Golden Lane". By 1921 Mexico had become the second largest oil producer in the world, with annual output of 193 million barrels.
1914	Winston Churchill, as First Lord of the Admiralty, pushed for the conversion of fuels for the Royal Navy from coal to oil. The House of Commons agreed to the historic measure in July 1914.
1914	In World War 1 and in future wars the supply of oil became a crucial asset. With the switch from coal to oil, the growing energy demands led to a supply shortage. U.S. oil production rose from 266 million barrels or 65% of world output to 335 million barrels or 67% by 2017.
1918	World War 1 ends with the signing of the armistice on 11 November 1918.



Period	Key Events
1920	The number of motor vehicles in the U.S jumped from 1.8 million in 1914 to 9.2 million by 1920 leading to fears that oil supply would run out, with the director of the United States Bureau of Mines predicting in 1919 that <b><i>"within two to five years the oil fields of this country will reach their maximum production, and from that time on we will face an ever increasing decline."</i></b>
1922	The La Rosa strike in 1922 put Venezuela on the oil map, despite earlier predictions that its prospects were poor. In 1921 the country produced just 1.4 million barrels and by 1929 it was running at 137 million barrels, second only to the U.S in total output.
1928	Fearing a decline in oil supply, a concerted effort in foreign oil exploration saw the American's focus their attention on the Middle East, particularly Mesopotamia, later to be known as Iraq. Under British mandate and with French interest in the region, the process was both drawn-out and complicated. In 1927 success in the field came from the Baba Gurgur Number 1. In July 1928 the Red Line Agreement was signed with each of Royal Dutch Shell, Anglo-Persian, the French and the Near East Development Company (representing the interests of the American companies) receiving 23.75%. The remaining 5% interest was held by Calouste Gulbenkian having picked up the original concession. The purpose of the Red Line Agreement was to prohibit any of the shareholders independently seeking oil interests in the region that covered the ex-Ottoman territory. The area captured all of the Middle East with the exception of Kuwait and would result in the creation of an oil monopoly or cartel, covering a vast region with immense influence.
1920's	The automobile revolution was in full swing and by 1929, 78% of all automobiles were in the U.S, which lead to oil demand rising over the decade from 1.0 million barrels a day to 2.6 million barrels. In terms of overall energy consumption, oil rose from 10% to 25%, with gasoline representing the bulk at 85%. This was the era of service stations with the number of drive-in stations jumping from 12,000 in 1921 to about 143,000 by 1929.
1928	The world experienced an oil glut following a meeting at Achnacarry Castle, Scotland, aimed at controlling production output, ultimately leading to the As-Is Agreement. The aim being to restrict petroleum production and therefore influence the pricing of oil.
1929	U.S. stock market crash and the start of the Great Depression.
1930	Columbus Joiner discovered oil in East Texas, the wildcat field later to be known as the Black Giant which proved to be forty-five miles long and five to ten miles wide.
1932	Standard Oil of California (Socal) struck oil in Bahrain.
1933	Socal wins concession in Saudi Arabia.
1934	Gulf and Anglo-Persian win a concession in Kuwait.
1936	Agreement forged between Socal and Texaco to combine their assets in Bahrain, Saudi Arabia and elsewhere, in a new venture named Caltex.
1938	Kuwait oil discovered at the Burgan field. Saudi Arabia followed weeks later with its own success at the Well Number 7, some three years after drilling had first begun in the country.
1938	Mexico nationalised the oil industry, with the Royal Dutch Shell Group as 65% owner of the largest player Mexican Eagle, most affected by the decision.
1939	Germany invades Poland, starting the World War II in Europe, continuing through Western Europe.

Period	Key Events
1941	The U.S. puts limits on gasoline exports to Japan in 1940. Japan declares war on the U.S, bombing Pearl Harbour on December 7.
1944	Everette Lee DeGolyer, pioneer of the use of seismographs in oil exploration, focuses his attention on the Middle East, declaring that the proven and probable reserves of the region - including Iran, Iraq, Saudi Arabia, Kuwait, Bahrain and Qatar - amounted to about 25 billion barrels, with Saudi Arabia holding 20% of the reserves. Further DeGolyer noted " <i>the centre of gravity of world oil is shifting from the Gulf – Caribbean area to the Middle East.</i> " For the U.S. this represented a changing of the guard, with its receding place in world oil now underway. At its peak the U.S. supplied 90% of the oil used by the Allies in World War II.
1945	World War II ends with the defeat of Germany and Japan.
1948	US imports of crude oil and products together exceeded exports for the first time. This led to the quest for oil offshore, with the Middle East the area of most focus. In Saudi Arabia, development was in the hands of the Saudi Aramco Oil Company, commonly referred to as Aramco (formally the Arabian-American Oil Company), representing the joint venture between Socal and Texaco, only to be later joined by Standard Oil of New Jersey (Exxon) and Socony Vaccum (Mobil). Ultimately Aramco was 100% American owned.
1940's	<p>A watershed period that altered the power base between concession governments and companies profit sharing arrangements, forged over the preceding decade.</p> <p>Pressure had been building to alter the concession terms under which oil companies paid governments. The first country to set things in train was Venezuela, under which a new "fifty- fifty" principle was agreed to by the government and company in 1943, so that each party would receive equal levels of income. This deal was followed by a similar agreement involving Saudi Arabia in 1950, between the government and the American companies that made up Aramco.</p>
1953	Iran nationalised Anglo-Iranian, a company previously 51% owned by the British Government. This became known as the first post war oil crisis.
1956	Suez Canal closed, severely cutting supply to Europe as Egypt applies pressure against the English and French. The second post war crisis ensues.
1948 - 1972	The rise of the Middle East and the decline of America was most evident during this era with free world crude oil production rising from 8.7 million barrels per day in 1948 to 42 million barrels per day by 1972. America's oil production rose from 5.5 million to 9.5 million barrels per day over this period and yet its share of total world production fell from 64% to 22%. In its place the Middle East lifted production from 1.1 million to 18.2 million barrels per day.
1950's	The 1950's also saw the return of Soviet production to the oil export market. By the end of the decade Russia had doubled production levels with output significant enough to displace Venezuela as the second largest oil producer in the world.
1959	Libyan oil discovery at Zelten setting the scene for a take-off in oil production. By 1965 Libya was the world's sixth-largest exporter responsible for 10% of all petroleum exports. By 1969 the country was producing three million barrels per day, exceeding even that of Saudi Arabia.

Period	Key Events
1960	As surplus oil continued to mount globally, competition among the suppliers leads to pressure being applied to the posted price for oil <sup>2</sup> . This in turn sees the exporting oil nations in the firing line with any cut severely depleting national revenues. When Standard Oil of New Jersey announces a cut of 7% per barrel to the posted price of Middle East crude it sets off a series of reactions. The suppliers respond quickly, creating the Organisation of Petroleum Exporting Countries more commonly referred to as OPEC. The five founding countries of OPEC, Saudi Arabia, Venezuela, Kuwait, Iran and Iraq, controlled 80% of world crude exports and collectively agreed that their primary objective was to restoring oil prices to their former level and to regulate ongoing crude production.
1967	Oil discovered at Prudhoe Bay, Alaska. The Suez Canal is shut for six days, leading to the third post-war oil crisis.
1969	Muammar al-Qaddafi seizes power in Libya, threatening the twenty-one oil companies operating in the country with closure unless his demands were met. At the conclusion of discussions Libya had extracted extra royalties and taxes while also tipping the share of profits arrangements from 50% to 55% in their favour, thus once again changing the balance of power from the oil companies to the governments of the producing countries.
1970's	World moved from a buyers to sellers' market with oil demand hitting 44 million barrels per day.
1972	Post World War II world energy consumption accelerated. Demand for oil underpins the strong lift, as U.S. consumption tripled from 5.8 million to 16.4 million barrels per day, Europe jumped to 14 million and Japan rose to 4.4 million barrels per day. Rising economic activity and a surge in car ownership over a quarter of a century sees U.S. car numbers lift from 45 million to 119 million, while the rest of the world rises from 19 million to 161 million. In turn, car ownership was instrumental in the demographic shift from city living to suburban life. The introduction of the Clean Air Act in London in 1957 also aided in spurring the switch from coal to oil.
1973	Middle East oil becomes the supply of last resort and Saudi Arabia the marginal supplier for all importers, replacing Texas and making up 21% of world exports.
1973	Egypt and Syria launch attack on Israel, oil embargo ensues, leading to the fourth post-war oil crisis. Oil exporters lift posted oil price by 70% to USD5.11 per barrel. By year end the agreed new price was lifted to USD11.65 per barrel.
1974	Saudi Arabia lifts profit share to 60%, later informs concessions holders, being the four U.S producers that it was moving to 100% ownership. Under the agreement Saudi Arabia takes over full control of all assets while Aramco continues to operate and provide services in exchange for the payment of twenty-one cents a barrel.
1974	U.S. President Richard Nixon resigns from office following Watergate scandal.
1975	Britain and Norway's North Sea oil comes to market.
1975	The sudden lift in crude prices, effectively referred to as the OPEC tax sends the industrial countries into deep recession.

<sup>2</sup> Prior to 1960 oil was primarily traded at "posted prices" which were effectively prices quoted by sellers to buyers and the market for oil had little in the way of transparency. Following the introduction of oil futures, oil was increasingly traded using oil futures prices as a benchmark, thus providing buyers and sellers much more transparency regarding the prevailing market price.

Period	Key Events
1977	Eight-hundred-mile pipeline connecting Alaskan oilfield to shipping port at Valdez completed. By 1978 flow rates hit 2 million barrels per day, a quarter of U.S. oil production.
1979	Accident at Three Mile Island nuclear plant in Pennsylvania. Iran takes hostages at U.S embassy. Oil prices spike from USD13 to USD34 a barrel, the world's fifth post-war oil crisis.
1980	Iraq's President Saddam Hussein launches war on Iran, non OPEC oil producers cut prices making significant market share gains. OPEC output slumps 27%, falling below 1970 levels.
1982	Non OPEC production overtakes OPEC production for the first time.
1982	The fallout from the economic slowdown felt most heavily in the oil sector. Countries caught with huge deficits and exposed more heavily to the energy markets feel the full brunt. Mexico, with USD84 billion in debt, was on the brink of bankruptcy. In the U.S., banks that had built up significant portfolios of loans to the oil industry were just as exposed, with Continental Illinois bailed out by the Government to the tune of USD5.5 billion of new capital. The world was on high alert as the impact from lower oil prices rolls through.
1983	OPEC finally responds to weak economic environment, dropping oil prices for the first time in its history, from USD34 to USD29 a barrel.
1983	The New York Mercantile Exchange introduced a new futures product for oil on March 30, effectively undermining OPEC's price setting powers. Driven by the economic laws of supply and demand, prices were now set by buyers and sellers on a daily basis. The benchmark price in all the transactions became WTI or West Texas Intermediate.
1983	Wildcat well in remote waters off Alaska with a one in three chance of success, fails to strike oil. Proves to be the most expensive dry hole in history, coming in at a cost of USD2 billion. The Mukluk well also became a turning point for the oil industry with the growing cost of exploration shifting attention to corporate acquisitions as a means of growing reserves.
1985	With OPEC members losing more and more ground to non OPEC producers, the decision was made to regain lost market share. The OPEC cartel was no longer prepared to protect price, rather their objective shifted to secure and defend a fair share of the world oil market. Oil price collapses, with West Texas Intermediate plummeting 70% from a peak of USD31.75 to USD10 per barrel. The oil market was in shock and producer countries in desperate straits. Consumers, in contrast, were jubilant, no longer fearing the prospect of permanent oil shortages. Cuts in production and adherence to a new quota system by the OPEC producers saw oil prices range between USD15-18 dollars a barrel.
1988	Iraq defeated Iran, and agreed to a cease-fire.
1990	Proven world oil reserves stand at one trillion barrels, compared to 670 billion in 1984. U.S. oil imports were at their highest level, exposing the country to Middle East oil once again. Iraq, led by Saddam Hussein invaded Kuwait. Being a large oil producer in its own right, Iraq's actions provoked a sharp response in world prices with oil doubling to USD40 a barrel. The U.S. considered using part of their strategic oil reserves, created in the mid 70's and holding 600 million barrels of oil. The Gulf crisis ended quickly in February 1991, following the U.S. decision to go to war.
1990's	Corporate restructuring becomes the imperative with majors combining to become super majors. BP merges with Amoco and then with ARCO whilst retaining the name BP. Exxon and Mobil became ExxonMobil. Chevron and Texaco came together to form Chevron. Conoco combined with Phillips to

Period	Key Events
	be known as ConocoPhillips, while Total, Elf Aquitaine and Petrofina combined and retained the name Total. Royal Dutch Shell remained unchanged.
1991	Soviet Union President Mikhail Gorbachev announced the dissolution of the Soviet Union.
1998	Financial crisis spreads, Russia defaulted, oil prices collapsed to USD10 a barrel.
2000	Vladimir Putin elected Russian President.
2001	World Trade Centre attacked, U.S. entered Afghanistan.
2003	U.S. oil shale development program restarted with authorities introducing leasing program permitting the extraction of oil shale and oil sands.
2003	Tesla Motors founded to build automobiles powered by electricity rather gasoline.
2004	World oil prices jump on strong global growth.
2006	U.S. President George Bush called for an end to the "addiction to oil".
2007	Global credit crisis begins.
2008	Oil prices hit USD147.27 a barrel. World reels from financial crisis, demand collapses, oil prices fall to USD32 a barrel.
2011	Political upheaval in Libya drove up oil prices to in excess of USD100 a barrel.
2012	Iranian nuclear sanctions ran the risk of disrupting Middle East oil supply. Tesla launched the Model S. The world's first premium electric sedan.
2013	Egypt and the threat of Suez Canal closure weighs on oil markets.
2016	Oil prices hit an eleven-year low, dropping below USD30 a barrel.
2016	Iran shipped first oil in March to European markets following the removal of a four-year embargo that aimed to curtail the country's nuclear ambitions. With its re-entry into the world oil market, production set to lift from 2.8 million barrels per day prior to the embargo to 3.6 million barrels per day.
2016	Saudi Arabia targets the IPO of Aramco with an expected market capitalisation of US \$2.5 trillion earmarked for 2018. Media reports note that the Saudi's are considering floating just 5% of Aramco making it the largest IPO, valued at US \$125 billion. <b>SFM</b>

Source: "The Prize – The epic quest for oil, money and power" by Daniel Yergin

## Evolution of Forward Guidance





## A Trend in Central Banking

We are in an era of negative interest rates. Central Banks are increasingly stepping into financial markets with their own balance sheets to change the shape of yield curves and to manipulate the liquidity levels in “free markets”. Their collective commentary is extensive and their jawboning gets abundant coverage in the financial pages. This hasn’t always been the case.

Prior to February 1994, the US Federal Open Market Committee (FOMC) made changes to the Federal funds rate and told precisely no one. Financial market participants were left to divine what the FOMC had decided by watching the behaviour of the “open market desk” in securities markets.

FOMC communications have changed radically over the past two decades and it accelerated with the onset of financial turmoil in 2008.

In this article we take a look at what is a relatively new trend in central banking – The art of communication.

Communication methods fall into three categories:

1. Indirect Signals
2. Direct Qualitative, or
3. Direct Quantitative Signals

**Indirect signals** provide implicit information to financial markets via information releases of related macroeconomic factors, such as price forecasts and expectations of inflation pressures. While this is a leap forward from 1994, today’s financial market participants and regulators in particular may find this level of communication inadequate on a standalone basis. While this is the preferred communication style of The Reserve Bank of Australia (RBA), it’s certainly not best practice.

Central banks such as the U.S. FOMC and the Bank of Japan have taken this a step further by providing explicit **direct qualitative signals** alongside indirect communication. They release statements that address past, present and future economic insights that are driving the expected direction of monetary policy.

It could be argued that **direct quantitative communication** is at the forefront of the communication trend in central banking. It has been incorporated by the central banks of New Zealand, Norway, and Sweden. These Banks independently publish explicit quarterly quantitative projections relating to their interest rate policy decisions.

In addition to this, direct guidance can be either “**Delphic**” or “**Odyssean**” in nature, or both.

Delphic-style communication aims to provide more transparency and clarification regarding the central bank’s interest rate policy without any further commitment.

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Odyssean style communication is aimed at changing market expectations by publically creating a binding commitment on the course of action that the central bank will follow.

Bank	Indirect Signals	Direct Qualitative	Direct Quantitative
Reserve Bank of New Zealand	✓	✓	✓
US Federal Reserve	✓	✓	
Bank of Japan	✓	✓	
Reserve Bank of Australia	✓	✓	
European Central Bank		✓	

**Communication Methods of Central Banks**

### Federal Open Market Committee (FOMC)

Since 1994 the FOMC has made significant changes in its communication methodology. The goal was to provide more consistency and greater transparency to its all-important monetary policy. This has been done through a mix of indirect and direct qualitative signals.

FOMC strategy has developed over time. The first weak “Delphic” commentary appeared in 1999 when the FOMC adopted a stated policy bias.

By 2003 the FOMC was providing an indirect “balance of risks” statement. These signals gave insight into expected policy, with weightings given to the risk of outlooks under categories such as;

- “balanced”,
- “heightened inflation pressures”,
- or “economic weakness”,

Observers readily mapped these signals into future policy options of unchanged, higher, or lower interest rates.

In addition to the “balance of risks” the FOMC began providing more explicit and direct qualitative signals. For the first time it produced statements about its future policy inclinations. Financial markets soon became acquainted with comments such as “*policy accommodation can be maintained for a considerable period*” and “*some further policy firming is likely to be needed*”.

In 2008, as the Global Financial Crisis stormed financial markets, the FOMC released projections for output growth, unemployment, and inflation to the public. When combined with interest rate forecasts these signals started shaping public expectations of short-term yield curves. This represented another shift in communication from the US Central Banks as it stepped up efforts to influence and achieve macroeconomic objectives.



In early 2011, as Federal Reserve officials were winding down the second round of their post-crisis bond-buying program known as quantitative easing, they were simultaneously plotting an exit strategy from this unprecedented monetary stimulus.

Janet Yellen, the then-Fed vice chair, and her subcommittee on communications strategy were working on a way to convey to the public more information about the central bank's view of the future. Public expectations were that a major shift in the Fed's policy stance was not too far off. They were working on the now famous interest rate "dot plot."

The "dot plot" chart released by the FOMC four times a year has since become a market-mover. For investors, the appeal is simply that it answers the key question of where policymakers expect to take interest rates over time.

Officials on the policy-setting FOMC meet eight times a year to formulate their monetary policy. Before every second meeting, they submit updated forecasts for economic growth, unemployment, and inflation a few years ahead. The dots show the interest rate projections underlying those forecasts, being the policy rate each official expects to set in order to make a given forecast a reality.

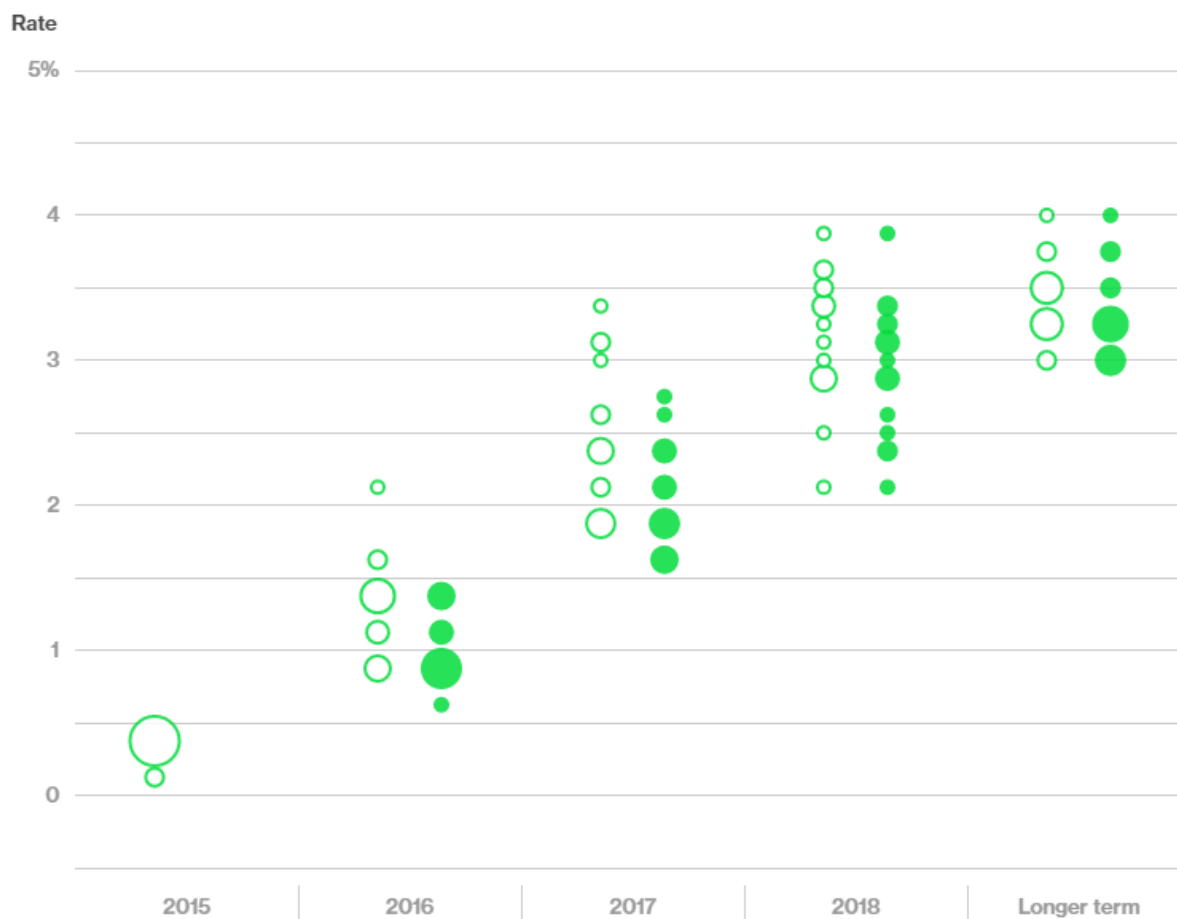
The Fed's dot plot can be a little hard to read. We have included a more user-friendly version from Bloomberg Markets that lets you compare the current rate forecast to previous ones.

By the time the first "dot plot" was released in January 2012, the Fed was no longer expecting to chart an exit from QE stimulus quite so soon. The economy had turned down again and additional bond-buying was on the horizon. Then-Fed Chairman Ben Bernanke consequently downplayed the dots, a tradition that Janet Yellen continued when she assumed leadership of the Fed at the beginning of 2014.

At times, the chart—with its 17 disparate projections of the future path of policy—can conflict with the "unified" message the committee is trying to send. This is exacerbated further by the daily headlines from the numerous interviews provided by the Governors of the FOMC. While FOMC communication has improved markedly since 1994 it's not best in class.

Compare projections between: Dec 2015 ▾ and Mar 2016 ▾

● ● ● 16 Number of governors voting 
 ○ ● Older/newer projection 
 ○ ● Median of projections



### European Union Central Bank (ECB)

On 1 January 1999 the European Central Bank (ECB) assumed responsibility for monetary policy decision-making in the euro area – the second largest economic area in the world after the United States. The transfer of this responsibility from 11 national central banks (NCBs) – 19 today – to a new supranational institution represented a milestone in a long and complex process of integration among European countries.

The task of the ECB is potentially the most difficult. Building trust among the 335 million citizens of the euro area is a major communication challenge. They are communicating in 18 countries using 15 different languages. In all these countries, citizens' expectations are different.

From the outset the ECB took a lead on transparency being the first major central bank to offer monthly press conferences. Twelve years on, the ECB enjoys a high degree of credibility worldwide for its monetary policy that targets price stability in the euro area.

The Governing Council of the ECB consists of the six members of the Executive Board and the governors of the euro area NCBs. Both the Governing Council and the Executive Board are chaired by the President of the ECB or, in his absence, by the Vice-President.

The responsibilities of the Governing Council are:

- To adopt the guidelines and take the decisions necessary to ensure the performance of the tasks entrusted to the euro system;
- To formulate the monetary policy of the euro area.

In 2013 the ECB adopted forward guidance as a means to shield the euro money market from unwanted spill over effects of other countries' policy decisions, namely the U.S.A.

Forward guidance consists of **direct qualitative signals**, statements and commentary in regards to their expectations of future monetary policy. The ECB also releases macroeconomic projections for both the Harmonized Index for Consumer Prices (HICP) and Real GDP, following consultation and approval from the Governing Council. Their aim is to provide clarification and reaffirmation of their assessment on the outlook for price stability.

Following its meeting on 4 July 2013, the ECB stated that it;

*"Expects the key ECB interest rates to remain at present or lower levels for an extended period of time".*

The ECB has maintained its forward guidance since then, reiterating it in January and February 2014, with further conditions outlined including clarifications on timeframe.

This form of forward guidance is clearly "Delphic" in nature. It has no binding commitments and is conditional on the central bank's prevailing macroeconomic expectations.

In 2015 the ECB noted that communication must move with the times; *"in these challenging times, when monetary policy has become more unconventional, we cannot stand still. That is why we have taken another step forward: from the start of next year we will publish summaries of the monetary policy meetings of the Governing Council. This will be an additional way to explain our actions and the discussions that inspired them".*

### Bank of Japan (BOJ)

The Bank of Japan was established in 1882. It is the sole bank that issues the yen. It also plays an important role in determining, enforcing and now communicating the government's economic and financial policies.

Until the late 1990s the bank was under the indirect control of the Ministry of Finance, but legislation enacted at that time made it autonomous of the ministry.

Before 1991 monetary policy was conducted via its 'window guidance' credit controls whereby the central bank would impose bank credit growth quotas on the commercial banks. This is considered to be the driver of the “bubble years” of 1986 – 89, the precursor to the lost decades – where the Japanese economy was in the grip of deflation.

Change was first ushered in by Prime Minister Shinzo Abe in late 2012 when the first steps to curb deflation were implemented.

Under the leadership of Haruhiko Kuroda the BOJ launched its current monetary policy in April 2013. It is termed qualitative and quantitative easing (QQE). It involves the purchase of securities and bonds to the value of 60-70 trillion yen a year. The direct qualitative signalling is noted in two statements in the publication:

*“The Bank will achieve the price stability target of 2 percent . . . at the earliest possible time, with a time horizon of about two years”*

*“The Bank will continue with QQE, aiming to achieve the price stability target of 2 percent, as long as it is necessary for maintaining that target in a stable manner. It will examine both upside and downside risks to economic activity and prices, and make adjustments as appropriate.”*

The first statement signals the Bank’s strong determination to achieve its 2 percent inflation target within a time horizon of two years. This calendar based feature was considered essential to gain confidence from the markets in the Bank’s intention in achieving their target.

An improvement in confidence is key to accelerating the pace that the medium-to-long term inflation expectations can be increased. This in turn may enhance price responsiveness to changes in the supply and demand balance, thereby creating a much needed natural price cycle and multiplier effect.

The second statement is a conditional type and contains plenty of wriggle room.

An important difference to note between the BOJ and other central banks is that they have not adopted unemployment related conditions in their forward guidance. The current unemployment rate of 3.3% is not a significant issue for Japan.

### **Reserve Bank of Australia (RBA)**

The Reserve Bank of Australia (RBA) offers both indirect and direct qualitative signals. The large majority of the RBA’s signalling comes through economic forecasts in the monthly Statement on Monetary Policy (SOMP), released 3 days after the rate decision. We note that the RBA does not meet in January, presumably taking the heat of the southern hemisphere summer into account.

Three things to know about the SOMP;

1. It is supplemented by the quarterly Consumer Price Index (CPI).

2. The SOMP provides the Banks expectations on relevant macroeconomic factors such as future inflationary pressures, unemployment, GDP growth forecast, and global economic outlook.
3. And the SOMP may or may not end with the RBA's "forward guidance". When it appears the "forward guidance" leaves a lot of room for interpretation and is unlikely to provide any defined time period.

The November 2014 SOMP closed with,

*"On present indications, the most prudent course is likely to be a period of stability in interest rates."*

The November 2015 SOMP closed with,

*"The Board will continue to assess the outlook and hence whether the current stance of policy will most effectively foster sustainable growth and inflation consistent with the target."*

We wonder how many businesses take this "forward guidance" into consideration in their hiring, budgeting and investment decisions. As we mentioned above, RBA communication is unlikely to win awards for best practice.

### Reserve Bank of New Zealand (RBNZ)

In contrast to the RBA, The Reserve Bank of New Zealand (RBNZ) has been at the cutting edge of Central Bank communication for some time. Accordingly, the RBNZ are viewed in some corners as one of the most transparent Central Banks in the world.

The RBNZ uses a combination of direct quantitative and qualitative communication that includes strong Delphic style and some mild Odyssean style. The RBNZ statements change when facts at hand and/or subsequent conditions change.

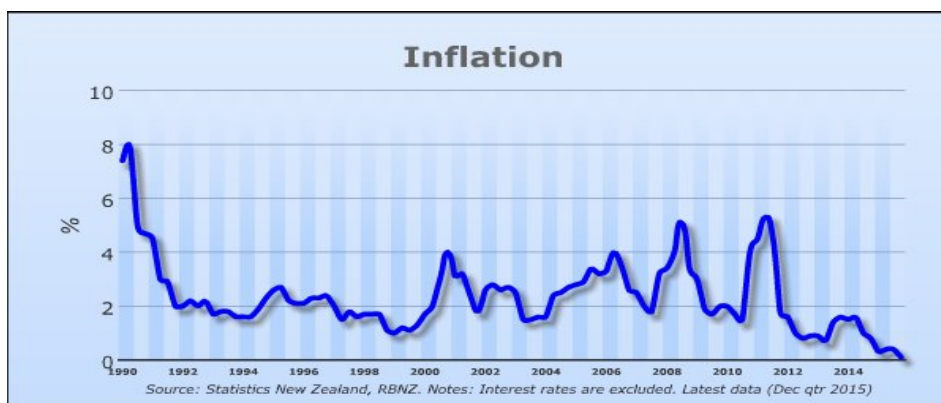
Since 1997, their approach to forward guidance has involved the publication of a quarterly outlook statement. This statement provides guidance for the 90-day interest rate and includes commentary and discussion on risks, contingencies, and possible alternative scenarios to their monetary policy statement.

The RBNZ takes the view that providing the public with insight into the Bank's interpretation of the current and future economic outlook, including the possible path of interest rates, can assist individuals and business in making more informed financial decisions.

- The RBNZ believes that on most occasions the Bank will have a clearer expectation of the economic outlook than the public due to the RBNZ's understanding of its own economic plans and as a result of its vastly larger economic research capability in relation to small business.
- The yield curve has an influence on economic behaviour, and the Bank's projection for the 90-day interest rate will assist in shifting the yield curve towards levels consistent with medium-term price stability, improving the effectiveness of monetary policy.

- Finally, publication of the 90-day interest rate increases accountability. The bank is required to keep future average inflation close to midpoint of the 1 to 3 percent target range (Under the Policy Targets agreement), aiming to maintain financial stability, avoiding unnecessary instability in output, interest rates and the exchange rate.

The Bank's inflation targeting success can be interpreted below.



Since 2000, New Zealand CPI (Consumers Price Index) inflation has averaged around 2.7 percent. This compares with averages of 2.4 percent in the 1990s, and averages of over 11 percent for the previous two decades.

It is open for question as to whether the public takes the Bank's information as definitive, despite it being noisy and imperfect.

The RBNZ stresses to financial market participants and the public that the 90-day interest rate is a conditional projection, and not a commitment from the Bank. They take the view, rightly so, that the effectiveness of the monetary policy is hampered if the public take the forecast as a commitment.

Uncertainties obviously include cyclical factors, the strength of international economy and associated movements in commodity prices and exchange rates. Simply put, the economy will almost always shape itself differently than the way the Bank has forecasted. While the RBNZ knows this; it is offering a full discussion of their assumptions and the risks in their projection, so as to supplement the limitation of the public's knowledge.

### Summary

There is perhaps no surprise in our assessment that the RBNZ do it very well. Information that cannot be communicated clearly and with transparency is not good policy in our eyes and if given the chance we could do far worse than offshoring the governing of this country to New Zealand. **SFM**

## Company visit diary March 2016 Quarter

### January

AXP	AirXpanders management meeting	21/01/16
RMD	ResMed Q2 2016 results conference call	22/01/16

### February

NVT	Navitas interim result 2016 meeting	02/02/16
WHC	Whitehaven Coal interim result 2016	08/02/16
OFX	OzForex Group acquisition update conference call	08/02/16
CL1	Class management meeting	09/02/16
CAR	Carsales interim results 2016 conference call	10/02/16
CPU	Computershare interim result 2016 conference call	10/02/16
ASX	ASX interim result 2016 meeting	11/02/16
COH	Cochlear interim result 2016 meeting	11/02/16
SGR	Star Entertainment Group interim result 2016 conference call	16/02/16
CSL	CSL interim result 2016 conference call	16/02/16
GBT	GBST interim result 2016 meeting	16/02/16
RKN	Reckon full year result 2016 meeting	16/02/16
AUT	Altium interim result 2016 conference call	17/02/16
DMP	Domino's Pizza Enterprises interim result 2016 meeting	17/02/16
JIN	Jumbo Interactive interim result 2016 conference call	18/02/16
SOM	Somnomed interim result 2016 meeting	18/02/16
JHX	James Hardie Industries Q3 2016 conference call	19/02/16
SGM	Sims Metal Management interim result 2016	19/02/16
NHF	NIB interim result 2016 meeting	22/02/16
IFM	Infomedia interim result 2016 conference call	23/02/16
VRT	Virtus Health interim result 2016 meeting	23/02/16
AGI	Ainsworth Game Technology interim result 2016 meeting	23/02/16
SRX	Sirtex Medical interim result 2016 conference call	24/02/16
FLT	Flight Centre Travel Group interim result 2016 conference call	24/02/16
IFL	IOOF interim result 2016 conference call	24/02/16
IRE	IRESS full year result 2015 meeting	25/02/16
BRG	Breville Group interim result 2016 meeting	25/02/16
SEK	SEEK interim result 2016 conference call	25/02/16
ACX	Aconex interim result 2016 meeting	26/02/16
BKL	Blackmores interim result 2016 meeting	26/02/16
SRF	Surfstitch interim result 2016 meeting	29/02/16

### March

MYO	MYOB full year result 2016 conference call	01/03/16
IQE	Intueri Education full year 2015 meeting	01/03/16
RMD	ResMed Brightree acquisition conference call	08/03/16

N/A	Tegel IPO analyst briefing	14/03/16
SEK	SEEK investor relations conference call	15/03/16
N/A	InfoTrack management meeting	15/03/16
N/A	Motorcycle Holdings IPO briefing	15/03/16
ACX	Aconex Conject acquisition conference call	16/03/16
OVH	OneVue Holdings presentation	22/03/16
NTC	NetComm Wireless presentation	22/03/16
HUB	HUB24 presentation	22/03/16
BWX	BWX presentation	22/03/16
MYS	MyState management meeting	22/03/16
FLT	Flight Centre Travel Group	23/03/16
N/A	Airbnb presentation	23/03/16
HLO	Helloworld presentation	23/03/16
N/A	Hamilton Island Resort presentation	23/03/16
N/A	Scottish Pacific pre-IPO briefing	31/03/16

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