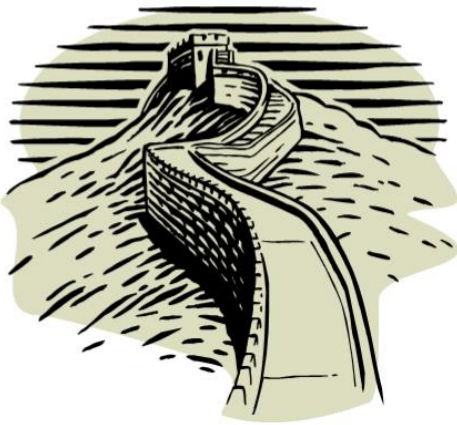


↗ Harbour Investment Horizons



China changing

Economics, housing and Fonterra's Chinese businesses – November 2014 research trip to China

Abstract

Harbour recently returned from a two-week research trip to China. We visited multiple cities and talked to people from a wide range of industries, including seeing Fonterra and its businesses in China. Our general impression is that the reforms announced in 2013 are being implemented and they are leading to slower activity-levels in short-term. The property sector is where the biggest pressure points exist, however we feel that the Government is prepared to stimulate this sector to avoid financial stress elsewhere in the economy. On the dairy-side, we came back relatively neutral. Fonterra certainly has the potential to make this business a lot bigger – the question remains at what cost? The company is investing a lot of money and appears to have the right people with the required skills in place, but it is likely to take years before we see financial evidence of the sustainability of these businesses.

Oyvinn Rimer, Director & Research Analyst

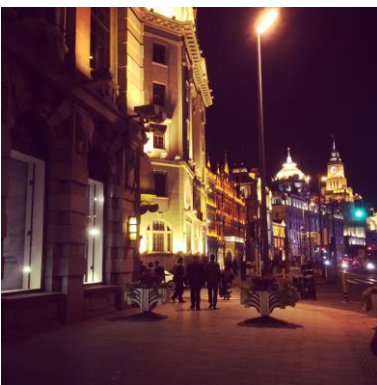
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Executive Summary



Harbour recently spent two weeks travelling in China, covering cities including Beijing, Chengdu (West China), Shanghai and Hangzhou. On our trip, we met with a large number of analysts, consultants, economists, metals traders and companies who provided us with valuable insights into the macroeconomic and industry outlooks. We also attended the Fonterra investor trip, which gave us a better understanding of their footprint, challenges and opportunities in the Chinese market.

Macroeconomic concerns for heavy industry and property construction, but green shoots exist elsewhere



A key observation is that people's **sentiment** towards the macroeconomic outlook has worsened since our previous China-trip 12 months ago. This is particularly true for heavily industrialised sectors such as mining, metal refineries and steel mills. Much of the weaker sentiment stems from a view that demand will be relatively soft in 2015 as the (very large) housing construction sector is at or near its peak activity level. Implementation of Government-led reforms is also starting to have an impact, with capacity consolidation and environmental reforms adding additional constraints on heavy industry (see our **Harbour Navigator** from November 2013 for details of reform-announcements at the 3rd plenum). Strong exports, consumption growth and a Government with ample room to stimulate the economy provide short-term offsets to the weakening industrial sector.

Fonterra up-close in China – investor trip



On the Fonterra investor trip, we gained further insights into the China value proposition through a close look at the Brands business (primarily Anlene, Anmum and Anchor), the Foodservices business and the milk-supply strategy. Fonterra is the dominant force in the Foodservices segment in China and has a real opportunity to expand this successful model into Tier 2 and Tier 3 cities. It also has an impressive management team in charge of the Brands and Farming businesses in China. However, China is a relatively high-risk and expensive market to compete in (across sectors) and we believe it will take years before the financial returns of current investments can be reaped in these businesses. Short-term volatility in commodity prices could however sweeten margins in the Brands business this year as input costs are much lower than last year. We do see significant downside risk to the current farmgate milk price forecast of \$5.30/kgMS, which is likely to increase the margins in the brands business as dairy ingredient prices go down.

Macroeconomic highlights

Near-term economic outlook cyclically soft



Figure 1: Example of new mid-to-high level housing development. This are the type of units that appear to be in over-supply on an aggregate level (though these particular ones were largely fully sold).

Relative to 12 months ago, we were surprised at the negative move in sentiment this time around. We were **consistently presented with a negative macroeconomic outlook for the near-term**, driven by an expectation that housing construction activity will slow and possibly go backwards in 2015. The flow-on effects for the 'shadow banking' sector and heavily indebted mining and metals sectors were noted as risks. However, if we were to form a consensus from our meetings, it **suggests that GDP growth will gradually moderate from mid-7% this year towards 6% by 2020**, with the possibility of a few short-term deviations from this path as the economy transitions towards consumption and innovation.

The Government seems acutely aware of the pressure-points in the economy and has suggested that the **growth model has to change** away from fixed asset investments and cheap labour towards a consumption and innovation economy. The foundations for this transition were laid at last year's [3rd Plenary Session](#), when economic reforms were announced, and further enhanced at this year's 4th Plenary Session, where the legal framework required to achieve this was announced. This outlines the plan for a major restructuring of the economy and is likely to take significant time and resources. However, we could already see signs of implementation of last year's policy announcements.



Figure 2: Example of a typical newly built lower-end apartment, ranging from 49sqm to 69sqm. This type of development in Tier 1 and Tier 2 cities are benefiting from real demand through rural-urban migration and also from local people upgrading from old and basic housing to new and modern.

The **crack-down on corruption may have had the most immediate impact**, with the Government on a mission to eliminate wide-spread corruption. For example, the arrests and naming-and-shaming of offending officials and corporate executives has led to a significant hit to the sales of luxury goods (people are too scared being seen with excessive wealth on display). One luxury goods consultant told us that 40% of this market has disappeared in one year. This effect seems to be limited however to the high-end market, with mid-level consumption still showing impressive growth. The anti-corruption campaign has also been significant at the other end of the value chain. Basic materials companies and metals refiners are reporting that their cost-base has dropped up to 30% by removing unreasonable 'fees and levies' to local Governments.

In addition to lower fees and levies, companies in these sectors have made significant efforts to **improve efficiencies in the absence of Government stimulus**. Costs are being managed down and a focus on earnings is a refreshing change from our previous experience of seeing

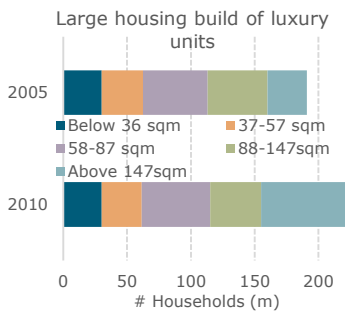


Figure 3: Over-representation of high-end residential housing poses a challenge for developers holding unsold inventory. Source: GavekalDragonomics, Macquarie

revenue maximisation being the primary objective. A combination of efficiency gains and fewer fees and levies suggests to us that the **consensus cost-curve for Chinese miners and metals-refiners is too high** and thus unlikely to provide the much anticipated price-support for bulk (in particular) commodities.

Property construction – a pressure point

Most of the people we talked to suggested that a distortion in the stock of housing has emerged, with a large oversupply of high-end units having been built since 2005. This has come at the cost of smaller, more affordable units where demand exceeds supply. For a number of reasons (corruption crack-down being one), the demand for high-end units has rapidly softened and has caused the **housing construction sector to become the Achilles heel of macroeconomic sentiment** in China.

Given the sector’s large consumption of raw materials, any slow-down in construction activity could have significant upstream consequences, both within China and for Australian miners. It is easy to paint a bleak picture of the housing sector and we have all seen the ‘ghost town’ headlines of vacant buildings, suggesting overbuild and excessive inventory. However, we believe the overbuild has become a cyclical problem as many of the historic moral hazards that previously provided the wrong incentives for developers are being addressed. As a result, structural problems are reducing at a very gradual pace, which may reduce the probability of sharp economic shocks.

Long-term however, we **still believe there is a strong fundamental case for housing demand**. This is likely to come from sources such as **urbanisation**, which is far from mature (50% now, likely to go to >70%); better conditions for rural-to-urban migrants requiring more **social housing**; and an **ageing population** that would require the construction of non-existent age-care facilities (currently 17 year waiting lists in Beijing to get a bed in an age care facility). The **replacement cycle of housing is also likely to become the largest driver for demand**. The Chinese building boom started in 1998 and the replacement of early developments is now increasingly a demand-driver.

The fall in China's housing demand will come mainly from upgrading

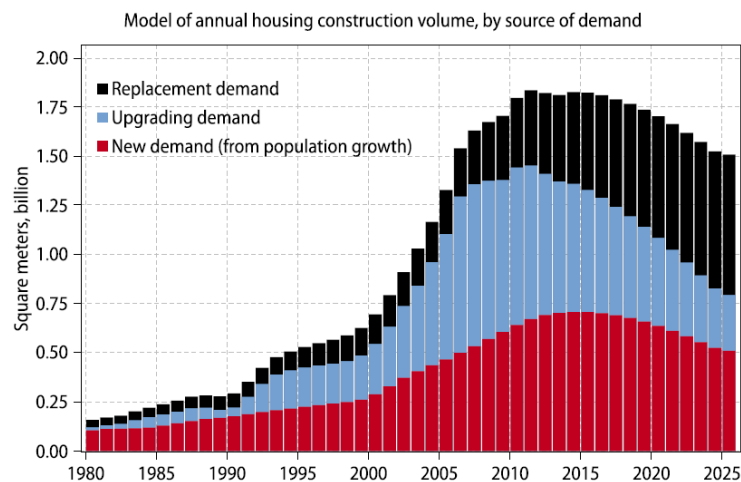


Figure 4: Replacement of existing housing stock is likely to become a driver of housing construction activity

Source: GavekalDragonomics, Macquarie

The near term problem is that for a long period of time, property developers have been reluctant to build low-end housing as it gives very little 'status' to the developers. In the New Zealand market, developers focus on bottom-line profits and it is somewhat difficult to conceptualise that 'saving face' is more valuable than making a return on investment. When times were good, being a developer of high-end units was good business, but large scale developments of affordable units that have genuine demand has been neglected.



Figure 5: Scaled model of a housing and commercial development. It was noted that the amount of greenery and park-space on the plans did not necessarily reflect reality too closely.

Additionally, local governments have supported high-end building-activity as it reflects well on them having up-market buildings in their city; and (presumably) the fees and levies chargeable to these projects were better than the alternatives. Ultimately, this has led to a significant overhang of high-end housing inventory. Now that the market has slowed, developers have come under pressure, with high debt-levels and large unsold inventory to clear; and given the characteristics of the inventory (high-end), it could take a long time to sell. In the meantime, banks are unlikely to lend and developers are unlikely to commit to new projects.

Changing the growth model

Despite pockets of weakness, primarily concentrated in heavy industry, it feels like the Government is increasingly concentrating on achieving a sustainable economy where **economic, social and environmental factors are better balanced**. The 4th Plenum provided insights into how this will be achieved, with a continued focus on the corruption crack-down, and finally looking at changing the fundamental growth model.

The old model of fiscal and monetary stimulus is not a recipe to ensure a transition towards a sustainable high-income economy. A key step is to improve technical sophistication and add value to final products. The Government wants to **encourage innovation** to achieve this and announced a range of initiatives to provide the right incentives. Some of these include an **improved legal environment** that ensures the **protection of property rights** (almost a foreign concept to date); fiscal support through **large R&D tax credits**; and **subsidies** to those currently relying on imports of high-tech inputs to facilitate local production of these instead of foreign reliance.

There was also increased optimism that **capital markets reform** will happen as a necessary part of improving China's chances of success. There are multiple examples of how investment outcomes improved on the back of de-regulation and privatisation in China. For instance, the age-care sector has been Government controlled and is heavily underinvested. **Opening up a range of industries for private investment is seen as an important step towards a better allocation of capital.**

As tempting as it is to make a forecast, it feels like China is facing a few cyclical headwinds at the moment, but is in a good position to gradually transition away from heavy

industrial investments towards investment into industries that are supportive of domestic consumption (i.e. metro lines, hospitals and age-care facilities). All the anecdotes we picked up on the trip suggest that consumption is growing at good rates despite the luxury goods market falling away. This is happening right through the value chain, from household appliances through to staples, such as high-end food products including New Zealand dairy products and was confirmed by companies we talked to in the dairy sector.

Fonterra Investor Trip – China Brands, Foodservices and Ingredients

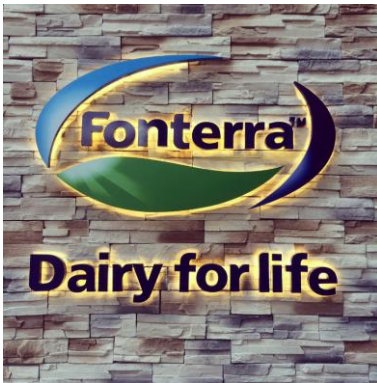


Figure 6: Entrance to Fonterra’s ‘application centre’ where the Foodservices business experiments with new recipes and hosts cooking demonstrations to bakers and chefs.

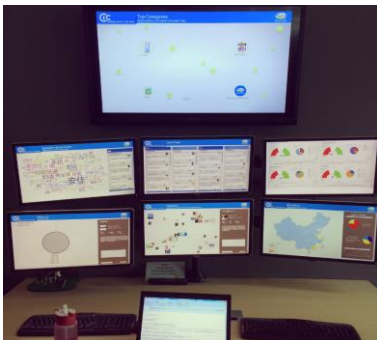


Figure 7: Fonterra’s social media control-room where they monitor country-wide social media discussions and collect real-time consumer sentiment about Fonterra-products.

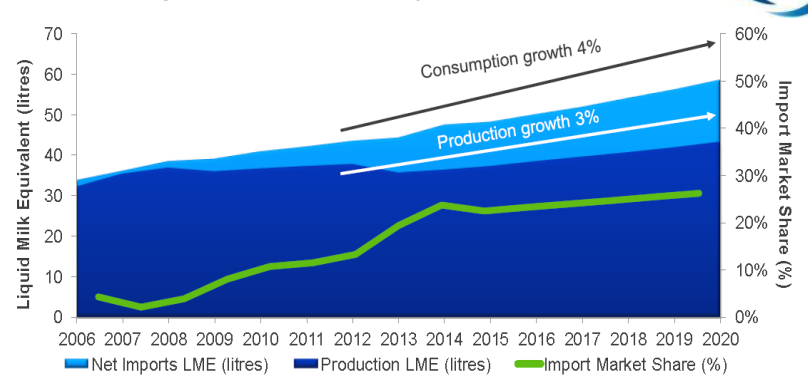
For a change of scene after a week of travelling through China focusing on macroeconomics and the demand for raw materials, we caught up with Fonterra’s management and other analysts in Shanghai to learn more about the brands, foodservices and ingredients businesses.

Day one started with management presentations and a focus on Fonterra’s strategic direction. Unlike past experience, it was noted that all the leaders were singing from the same song-sheet and there seems to be a genuine shared vision and culture across all business units. The general impression is that the people in charge of running these businesses have impressive backgrounds and the necessary experience to succeed in China. **The challenge will be to make an impact in a market where leading players are already established and likely to be fighting hard to maintain their positioning.**

Revised forecast growth-rate for Chinese net imports

A key update on the trip was a **revised long-term forecast for Chinese consumption growth of dairy products**. In the IPO Prospectus, Chinese demand growth to 2020 was expected to be 7%, outgrowing domestic supply by 3%. This is now **downgraded to 4% demand growth, outgrowing domestic supply by 1% (vs. 3% previously)**. Fonterra still expects demand-growth to exceed domestic supply-growth, albeit not by as much as previously forecast. We also heard a similar view when talking to competing domestic Chinese dairy companies, who believe the demand for dairy-imports will increase over time as domestic supply is unable to keep up with demand-growth.

China's dairy fundamentals are positive for us



Source: Agrifac / IFCA / Fonterra analysis

Figure 8: Fonterra’s revised forecast for Chinese dairy consumption and domestic supply.

Further consolidation of Chinese infant formula industry

Infant milk formula (IMF), 2014E

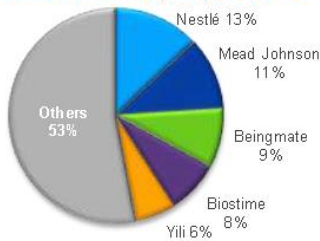


Figure 9: Infant formula market share in the Chinese market.

Source: Fonterra

Johan Priem, who leads Fonterra’s China business, presented the case for further consolidation in the Chinese infant formula market, with the top 5 players only having 47% market-share. This compares to over 75% globally. We think that for Fonterra to be successful with its own infant formula brand (Annum) in China (and make a meaningful impact), it is likely to require a significant investment to secure distribution and raise brand awareness.

This might help rationalise the Beingmate investment that is currently being worked through. Beingmate is already 3rd on the market-share rankings of infant formula and ranks 1st of the domestic players. A deal with Fonterra provides them with security of high-quality supply to underwrite their own growth aspirations; and Fonterra might gain access to Beingmate’s expertise in domestic distribution and China know-how – there seems to be mutual benefits to both parties. However, the size of the proposed investment is significant and it is likely to take a long period of time before we get an insight into the return on the invested capital; but with China, you are either in or you are out and there is clearly a race among players to secure necessary market share.

In addition to infant formula, Fonterra is hoping to leverage past success stories from South East Asia when marketing their paediatric Anlene product. This is a brand that focuses on bone-health and has been a great performer in jurisdictions where incident-rates of osteoporosis are relatively frequent. Anlene is marketed through supermarkets (and presumably other retail venues) where Anlene stands are set up to provide bone-scans where shoppers can get an immediate bone-density report to assess calcium requirements. Harbour has seen these stands in Malaysia and in China and they appear very popular with shoppers, who ultimately are introduced to the Anlene proposition. This could be a less competitive market-segment relative to infant formula.



Figure 10: Anlene stand at a Shanghai supermarket where bone-density scans are being offered to shoppers.

Foodservices: capital light, fast-growing business with growth options

Unlike brands, **foodservices is already a success story for Fonterra in China.** With a solid number-one market-share position and fast growing sales and earnings, Fonterra seems to be well established and has impressive customer networks. This is B2B-business at its best, with a partnership-like relationship with customers, where Fonterra provides guidance and support to ensure that the customer



Figure 11: Fonterra Foodservices cooking demonstration. These are frequently used at trade-shows and ‘town hall’ events to introduce the products to chefs who traditionally have not been using dairy products in their cooking/baking.



Figure 12: Shanghai bakery showcasing Fonterra Foodservices ingredients to customers to achieve premium-pricing for the final products (cakes and cheese cakes in this instance).

gets the right products and that it makes commercial sense for both parties. Despite already being a leading foodservices player, the growth outlook is still promising for this business as the company spreads its geographic reach and the Chinese consumer develops a palate for dairy products in cooking and baking.

Fonterra has also teamed up with local chefs who organise cooking demonstrations at ‘town hall’ events to showcase the unique features of the Fonterra products (primarily Anchor branded). To ensure that the products will suit the local palate, the Foodservices team focuses on recipe-innovation to introduce recipes that are likely to be a hit with both potential customers and end-users. Anecdotal observations suggest that this strategy works and that prospective customers (large restaurants, bakeries and commercial kitchens) appreciate Fonterra’s efforts of doing market research on the end user demand (i.e. the customer’s customer) before marketing the commercial potential of each product.

Having seen Fonterra’s business in China, it is interesting to note how different it is relative to the New Zealand Milk Products (NZMP) business – it is hard to explain without seeing it. Despite management’s best efforts to align strategy and vision, it almost feels like an entirely different company. The vertical integration looks great on paper and may even be necessary to secure high quality ingredients, however the capital structure of the Group is likely to continue to be a drag on the China opportunity. Capital constraints from the cooperative makes it challenging to pursue growth-options in brands and foodservice, while at the same time having to catch up to stainless steel requirements (more milk powder plants) back in New Zealand. The limited access to equity capital and an already somewhat stretched balance sheet makes for an intricate funding puzzle when management has to decide which projects to pursue.

China farms

We have mixed views on the China farm investments. These are capital intense and will be a drag on capital expenditure for years to come as more farms are developed. The only proof that the farms yield good returns is management presentations suggesting >10% return on invested capital (ROIC) on developed farms and a target of 15% ROIC by 2017 (hard to verify from the published financial data). These returns are much better than Fonterra’s cost of capital and, if realisable, are attractive investments.



Figure 13: Anchor stand at a Shanghai hypermarket.

Having said that, we sympathise with the view that it may be strategically constructive to develop these farms. The relationship-building between Fonterra, Government and local partners is strengthened by Fonterra's efforts to secure a high-quality local milk supply and while doing that, pass on best-practice know-how to smaller local farmers to improve the value chain.

Diversity of supply is also a key strategic decision and given that supply shocks can hit isolated regions, having access to supply from various regions will help reliability of supply.

Hence, there are obvious reasons why Fonterra is working on adding to the Chinese raw milk supply and it could be accretive to the value of the company if they manage to deliver ROIC as high as 15% across the farming business. We remain unsure whether this is the best use of capital going forward and we expect that Fonterra will continue to do partnership deals to share some of the financial risk of these assets.

A note of caution

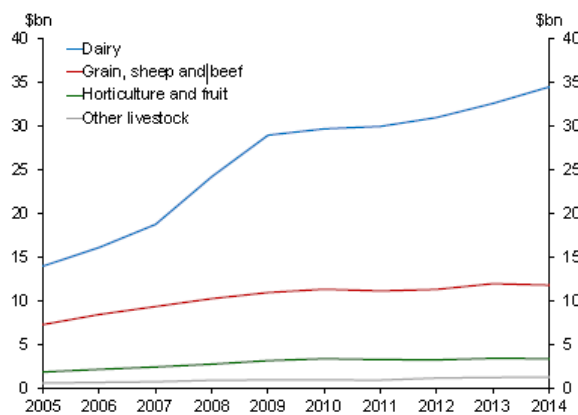
Bringing the discussion back to New Zealand, it is exciting to see the clear growth-options available to Fonterra and the New Zealand dairy industry through growing dairy-consumption and increasing willingness to pay in emerging markets. Although far from guaranteed, success in capturing more of the value-added brands category could yield great returns to Fonterra. However, in the short-term, we see little chance of Fonterra's farmgate milk price (FGMP) forecast of \$5.30/kgMS holding.

Few companies globally have better market intelligence into dairy markets than Fonterra and we tend to listen carefully to their market updates to gauge where the FGMP might go. However, we struggle with reconciling recent management language and the current (FGMP) forecast to the actual prices achieved to-date this season. On top of that, we have heard from other offshore dairy companies that the domestic Chinese supply is likely to have been larger than that reported by analysts and has led to further inventory-build beyond the strategic stockpiles that were sourced from New Zealand late 2013 and early 2014. In the absence of a price recovery that Fonterra has been expecting, we expect Fonterra to significantly cut its forecast after the December board meeting.

The impact of further cuts to the FGMP (and the advance rate payment schedule that sets out how much Fonterra pays its farmers on a monthly basis) will hit farmers’ cashflows. Remember that farmers received their final catch-up payment from last year’s bumper season last month (October 2014) and will only start to feel the true impact of the current environment this month as they move to receive only payments as set out in the advance rate schedule.

The Reserve Bank of New Zealand highlighted the risk of further weakness in the dairy sector in their latest Financial Stability Report.¹ They suggest that the price weakness has been warned sufficiently in advance that farmers have started managing their cost-base down. However they express concern about financial debt among a portion. They show the aggressive build-up in debt of farmers in the dairy sector over the last decade on the back of conversions. This debt is quite concentrated and the worst case is for milk prices to decrease sufficiently to no longer cover interest payments.

Agricultural lending by sector
(as at June)



Source: RBNZ Annual Agricultural Survey.

One offset to the lower FGMP could be improved earnings for the rest of the Fonterra Group. The brands and (to some extent) the foodservices businesses will pay less for dairy-ingredients and should therefore be able to grow margins. This should eventually trickle down as increased dividend payments. If the FGMP is cut further, Fonterra has the discretion to increase the dividend payout ratio to improve returns to shareholders during an otherwise tough year. If that happens, it will benefit investors in the Fonterra Shareholders’ Fund as well.

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http://www.rbnz.govt.nz/financial_stability/financial_stability_report/fsr_nov14.pdf

Overall, we **liked what we saw in China** and the work being done there by Fonterra. However, this is a market where **competition is fierce, particularly in the branded** segment. Hence, the risks are high and we are unlikely to see firm evidence of sustainable return on invested capital anytime soon.

In terms of the outlook for dairy prices, the long-term looks promising as Chinese demand keeps exceeding domestic supply – a dynamic likely to continue into the foreseeable future. However, the supply is more difficult to monitor and the supply response to last year's very high prices clearly triggered bigger volumes than what anyone had forecast.

The short-term might be somewhat more challenging than initially thought given larger-than-expected inventory build in China and Russian import bans still in place (dislocating a large part of the traded market). We expect the 2014/15 FGMP to be revised down next month (December 2014).

We will keep monitoring economic activity in China and assess the potential impacts of changes for the New Zealand economy and the investment opportunities available to New Zealand investors. We look forward to reporting back to you and thank you for your interest!

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