Fortnightly Agri Update

6 June 2018

Turning the tables – Forestry and wood processing

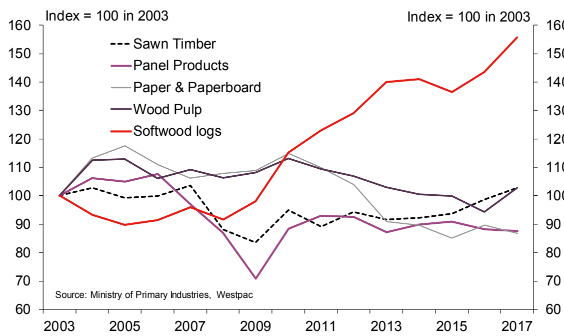
Recently, Westpac Economics took an in-depth look at New Zealand's forestry and wood processing sector in our Industry Insights series.[1] In this week's Fortnightly Agri Update, we highlight some of the key findings of this report. We also provide an update on the Government's decision to attempt eradication of the cattle disease Mycoplasma bovis from NZ.

Forestry is New Zealand's third largest goods export, behind dairy and meat, and generated export earnings of $5.4bn in 2017. It is also a significant employer, with around 24,000 people employed in the forestry and wood processing sector in New Zealand.

One of the biggest changes in the sector in recent years has been the growing importance of log exports. Strong Chinese demand has driven up prices and volumes have followed suit. The production of sawn timber has also grown, albeit at a more measured pace, with most sawn timber produced in New Zealand destined for the local market.

There is tension in the sector with strong international demand for logs pushing up costs for wood processors. Wood processors argue New Zealand should be processing more wood locally and exporting higher value processed wood products such as sawn timber, wood panels and paper products. However, in order to achieve this, New Zealand's wood processors would need to overcome a number of obstacles. New Zealand is a small economy, geographically distant from key export markets, and would face stiff competition from well-entrenched competitors. We often hear grumbling that New Zealand exports too many logs rather than value-added products, but we argue that New Zealand has positioned itself at the optimal part of the value chain

Forestry



Log production is also not without its challenges. Not least of these is the sustainability of forestry given the maturity profile of the forests in New Zealand. A large swathe of forests in New Zealand are set to be harvested over the next five years or so as they reach maturity. But some smaller log producers haven't been willing to wait that long, aiming to cash in on today's high prices by cutting down immature trees. The risk for New Zealand is that by cutting down these trees now, harvesting over the next 5 years or so may exceed tree growth. Consequently, forestry could end up adding to New Zealand's carbon emissions in coming years instead of reducing them.

The outlook for the sector is mixed. While the medium to long-term outlook for demand looks promising for log producers, there are some risks in the near-term. Chinese

[1] https://www.westpac.co.nz/assets/Business/Economic-Updates/2018/Bulletins-2018/Industry-Insight-Forestry-and-Wood-Products-May-2018.pdf

demand for logs is expected to slow as activity eases and structural reforms slow the pace of building activity. In the absence of an offsetting lift in demand from other countries, log prices are expected to ease from current high levels. Beyond this, population growth, particularly in emerging markets, is expected to underpin demand for logs. Demand from India in particular is expected to pick up strongly.

The near-term outlook for wood processors is more positive. As demand from China starts to slow, forestry owners are likely to redirect more logs to local sawmills at lower prices. The outlook for domestic residential building activity will also be important. Housing shortages in Auckland remain acute, but building activity is only expected to grind higher as capacity constraints bite and the industry struggles to overcome other challenges. However, beyond this the picture becomes less rosy. Although New Zealand has a competitive advantage in log production, producing logs more quickly and cheaply than other countries, it doesn't have the same edge in downstream wood processing as it lacks the economies of scale processors in other countries have. This competitive disadvantage will continue to be exaggerated by New Zealand's distance from key markets.

Mycoplasma bovis Update

Late last month, the New Zealand Government made the decision to attempt eradication of Mycoplasma boivs cattle disease from New Zealand's beef and dairy herds. It aims to do this by culling all cattle on farms where the disease is identified, plus some high risk farms under movement controls – an estimated 126,000 cattle over the next year or two (in addition to the around 24,000 cattle culled already). The response is expected to cost $870m, with farmers picking 32% of the tab and the Government footing the bill for the remainder.

While the impact of the disease on individual farmers involved is clearly devastating, the impact on production in the wider New Zealand dairy and beef industry is smaller. MPI expects that in year one, 142 farms will need to be depopulated out of a total of around 20,000 beef and dairy farms across the country. The $278 million cost to farmers is equivalent to around 15 cents on the milk price. And while milk production could be affected in the order of 1%, that's well within usual seasonal variations and there will be other factors influencing the industry's production decisions (for example Fonterra's opening milk price forecast of $7 is likely to encourage a lift in production, while Fonterra has said it expects it's milk collections to be up 1.5% this season). In addition, there is no risk to trade as all our trading partners (bar Norway) already have the disease.

That said, Mycoplasma bovis has knocked rural confidence which could have noticeable flow-on effects for the agricultural sector. While some of the uncertainty has dissipated following the Government's announcement, eradication remains a difficult task, as does managing the processes and ensuring affected farmers are compensated. No other country has attempted eradication, let alone been successful. There will be a further round of national bulk milk surveillance testing in spring, and the operation will be assessed in light of those results in early 2019 meaning we are a long way off the final word on this matter yet.

Anne Boniface
Senior Economist

GlobalDairyTrade Auction Results, 6 June 2018

	Change since last auction	Price index USD/Tonne
Anhydrous Milk Fat (AMF)	-1.7%	6,222
Butter	-3.5%	5,581
Butter Milk Power (BMP)	17.7%	2,314
Cheddar	-3.6%	3,998
Lactose	3.9%	714
Rennet Casein	2.7%	5,015
Skim Milk Powder (SMP)	0.3%	2,051
Whole Milk Powder (WMP)	-1.1%	3,205
GDT Price Index	-1.3%	1,051

Farmgate milk price forecasts

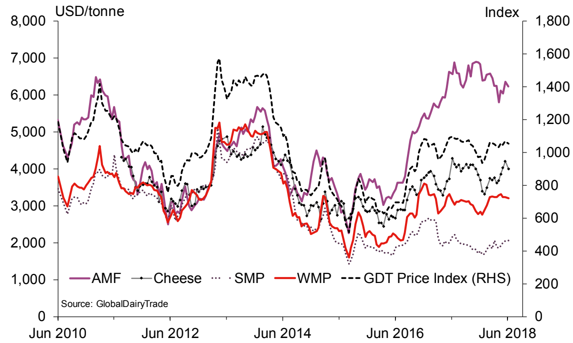
	2017/18		2018/19	
	Westpac	Fonterra	Westpac	Fonterra
Milk Price	$6.75	$6.75	$6.40	$7.00

Beyond the farm gate

Dairy

	Current price level compared to 10 year average	Next 6 months
Trend	Average	↘

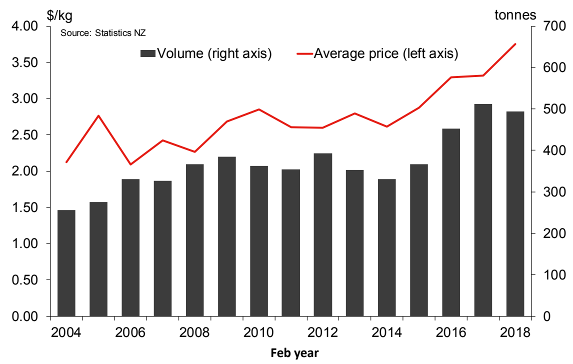
Dairy prices fell 1.3% in last night's GlobalDairyTrade auction, led by a 3.5% fall in butter prices. Whole milk powder prices were also down, falling 1.1%. The start of June marks the new dairy season in New Zealand. Our current forecast of $6.40 milk price sits noticeably below Fonterra's opening forecast of $7. Part of the difference in view is likely to stem from our outlook for Chinese growth. We're expecting a significant slowdown in the Chinese economy this year and next, and are sceptical that the Chinese consumer will be completely unaffected by this. Consequently, we expect to see dairy prices slide further in the coming months. Fonterra has also announced a surprising 20 cent upgrade to its 2017/18 milk price forecast which is now $6.75. Higher commodity prices have impacted on the forecast dividend range which has been revised down to 15-20 cents per share (previously 25-30 cents).



Kiwifruit

	Current price level compared to 10 year average	Next 6 months
Trend	High	→

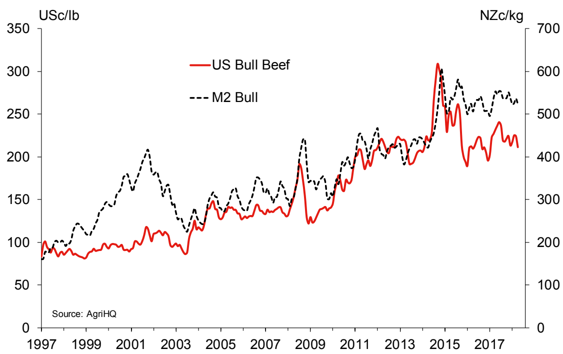
Zespri reported a 38% lift in its annual net profit and tripled its dividend for the season ended 31 March although NZ kiwifruit sold fell by 11%. China and Japan are the two key markets for Zespri, with the company also looking to leverage sell Chinese grown kiwfruit under the Zespri label in the future. Shareholders have also backed changes to the constitution to address a mismatch between growers who supply kiwifruit to Zespri and people who own shares in Zespri (including former growers) with an increased loyalty payment to growers with long-term supply contracts one consequence of the change.



Beef

	Current price level compared to 10 year average	Next 6 months
Trend	High	↘

Dry conditions are emerging in some key cattle producing states in the US which has seen slaughter rates accelerate in recent weeks. While US demand has been firm, this lift in supply could put downward pressure on imported beef prices.



Note: Trend arrows indicate direction of change in world prices.

Contact the Westpac economics team

Dominick Stephens, Chief Economist +64 9 336 5671

Michael Gordon, Senior Economist +64 9 336 5670

Satish Ranchhod, Senior Economist +64 9 336 5668

Anne Boniface, Senior Economist +64 9 336 5669

Paul Clark, Industry Economist +64 9 336 5656

Any questions email: economics@westpac.co.nz

Past performance is not a reliable indicator of future performance. The forecasts given in this document are predictive in character. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

Disclaimer

Things you should know

Westpac Institutional Bank is a division of Westpac Banking Corporation ABN 33 007 457 141 ('Westpac').

Disclaimer

This material contains general commentary, and market colour. The material does not constitute investment advice. Certain types of transactions, including those involving futures, options and high yield securities give rise to substantial risk and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This information has been prepared without taking account of your objectives, financial situation or needs. This material may contain material provided by third parties. While such material is published with the necessary permission none of Westpac or its related entities accepts any responsibility for the accuracy or completeness of any such material. Although we have made every effort to ensure the information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of the information, or otherwise endorses it in any way. Except where contrary to law, Westpac and its related entities intend by this notice to exclude liability for the information. The information is subject to change without notice and none of Westpac or its related entities is under any obligation to update the information or correct any inaccuracy which may become apparent at a later date. The information contained in this material does not constitute an offer, a solicitation of an offer, or an inducement to subscribe for, purchase or sell any financial instrument or to enter a legally binding contract. Past performance is not a reliable indicator of future performance. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

Country disclosures

Australia: Westpac holds an Australian Financial Services Licence (No. 233714). This material is provided to you solely for your own use and in your capacity as a wholesale client of Westpac.

New Zealand: In New Zealand, Westpac Institutional Bank refers to the brand under which products and services are provided by either Westpac or Westpac New Zealand Limited ("WNZL"). Any product or service made available by WNZL does not represent an offer from Westpac or any of its subsidiaries (other than WNZL). Neither Westpac nor its other subsidiaries guarantee or otherwise support the performance of WNZL in respect of any such product. The current disclosure statements for the New Zealand branch of Westpac and WNZL can be obtained at the internet address www.westpac.co.nz. For further information please refer to the Product Disclosure Statement (available from your Relationship Manager) for any product for which a Product Disclosure Statement is required, or applicable customer agreement. Download the Westpac NZ QFE Group Financial Advisers Act 2008 Disclosure Statement at www.westpac.co.nz.

China, Hong Kong, Singapore and India: This material has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (as defined in the applicable Singapore laws and regulations) only. Recipients in Singapore of this material should contact Westpac Singapore Branch in respect of any matters arising from, or in connection with, this material. Westpac Singapore Branch holds a wholesale banking licence and is subject to supervision by the Monetary Authority of Singapore. Westpac Hong Kong Branch holds a banking license and is subject to supervision by the Hong Kong Monetary Authority. Westpac Hong Kong branch also holds a license issued by the Hong Kong Securities and Futures Commission (SFC) for Type 1 and Type 4 regulated activities. This material is intended only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance. Westpac Shanghai and Beijing Branches hold banking licenses and are subject to supervision by the China Banking Regulatory Commission (CBRC). Westpac Mumbai Branch holds a banking license from Reserve Bank of India (RBI) and subject to regulation and supervision by the RBI.

UK: The contents of this communication, which have been prepared by and are the sole responsibility of Westpac Banking Corporation London and Westpac Europe Limited. Westpac (a) has its principal place of business in the United Kingdom at Camomile Court, 23 Camomile Street, London EC3A 7LL, and is registered at Cardiff in the UK (as Branch No. BR00106), and (b) authorised and regulated by the Australian Prudential Regulation Authority in Australia. Westpac is authorised in the United Kingdom by the Prudential Regulation Authority. Westpac is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential

Disclaimer continued

Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. Westpac Europe Limited is a company registered in England (number 05660023) and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

This communication is being made only to and is directed at (a) persons who have professional experience in matters relating to investments who fall within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (b) high net worth entities, and other persons to whom it may otherwise lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). Any person who is not a relevant person should not act or rely on this communication or any of its contents. The investments to which this communication relates are only available to and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such investments will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely upon this communication or any of its contents. In the same way, the information contained in this communication is intended for "eligible counterparties" and "professional clients" as defined by the rules of the Financial Conduct Authority and is not intended for "retail clients". With this in mind, Westpac expressly prohibits you from passing on the information in this communication to any third party. In particular this communication and, in each case, any copies thereof may not be taken, transmitted or distributed, directly or indirectly into any restricted jurisdiction. This communication is made in compliance with the Market Abuse Regulation (Regulation(EU) 596/2014).

Investment Recommendations Disclosure

The material may contain investment recommendations, including information recommending an investment strategy. Reasonable steps have been taken to ensure that the material is presented in a clear, accurate and objective manner. Investment Recommendations for Financial Instruments covered by MAR are made in compliance with Article 20 MAR. Westpac does not apply MAR Investment Recommendation requirements to Spot Foreign Exchange which is out of scope for MAR.

Unless otherwise indicated, there are no planned updates to this Investment Recommendation at the time of publication. Westpac has no obligation to update, modify or amend this Investment Recommendation or to notify the recipients of this Investment Recommendation should any information, including opinion, forecast or estimate set out in this Investment Recommendation change or subsequently become inaccurate.

Westpac will from time to time dispose of and acquire financial instruments of companies covered in this Investment Recommendation as principal and act as a market maker or liquidity provider in such financial instruments.

Westpac does not have any proprietary positions in equity shares of issuers that are the subject of an investment recommendation.

Westpac may have provided investment banking services to the issuer in the course of the past 12 months.

Westpac does not permit any issuer to see or comment on any investment recommendation prior to its completion and distribution.

Individuals who produce investment recommendations are not permitted to undertake any transactions in any financial instruments or derivatives in relation to the issuers covered by the investment recommendations they produce.

Westpac has implemented policies and procedures, which are designed to ensure conflicts of interests are managed consistently and appropriately, and to treat clients fairly.

The following arrangements have been adopted for the avoidance and prevention of conflicts in interests associated with the provision of investment recommendations.

(i) Chinese Wall/Cell arrangements;

(ii) physical separation of various Business/Support Units;

(iii) and well defined wall/cell crossing procedures;

(iv) a "need to know" policy;

(v) documented and well defined procedures for dealing with conflicts of interest;

(vi) steps by Compliance to ensure that the Chinese Wall/Cell arrangements remain effective and that such arrangements are adequately monitored.

U.S.: Westpac operates in the United States of America as a federally licensed branch, regulated by the Office of the Comptroller of the Currency. Westpac is also registered with the US Commodity Futures Trading Commission ("CFTC") as a Swap Dealer, but is neither registered as, or affiliated with, a Futures Commission Merchant registered with the US CFTC. Westpac Capital Markets, LLC ('WCM'), a wholly-owned subsidiary of Westpac, is a broker-dealer registered under the U.S. Securities Exchange Act of 1934 ('the Exchange Act') and member of the Financial Industry Regulatory Authority ('FINRA'). This communication is provided for distribution to U.S. institutional investors in reliance on the exemption from registration provided by Rule 15a-6 under the Exchange Act and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors in the United States. WCM is the U.S. distributor of this communication and accepts responsibility for the contents of this communication. All disclaimers set out with respect to Westpac apply equally to WCM. If you would like to speak to someone regarding any security mentioned herein, please contact WCM on +1 212 389 1269. All disclaimers set out with respect to Westpac apply equally to WCM.

Investing in any non-U.S. securities or related financial instruments mentioned in this communication may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the SEC in the United States. Information on such non-U.S. securities or related financial instruments may be limited. Non-U.S. companies may not subject to audit and reporting standards and regulatory requirements comparable to those in effect in the United States. The value of any investment or income from any securities or related derivative instruments denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related derivative instruments.

The author of this communication is employed by Westpac and is not registered or qualified as a research analyst, representative, or associated person under the rules of FINRA, any other U.S. self-regulatory organisation, or the laws, rules or regulations of any State. Unless otherwise specifically stated, the views expressed herein are solely those of the author and may differ from the information, views or analysis expressed by Westpac and/or its affiliates.