



Viticulture – Fermenting

Presently, wine is a \$1.6 billion export industry for New Zealand, with a substantial scope for growth. That success will rest on continuing to identify the sources of demand growth, areas for productivity improvements and changing tastes around the world.

The wine industry is gearing up for boosting their global presence, on the back of firming global demand and strategies supporting productivity growth locally. Although technically classified as viticulture, the wine industry forms a vital part of the overall horticultural industry across New Zealand. Part of the 2020 growth strategy across the horticultural industry is the New Zealand wine industry's target of \$2 billion in exports by 2020.

The future of viticulture in New Zealand will largely rely on how we respond to developments on the globalisation front. As we have noted in the past, trade plays a vital role in the success of New Zealand's agricultural markets. The upward trend in the global environment – see more in our August 2017 Economic Overview – is opening up opportunities for our key export destinations.

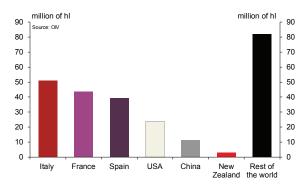
Global Wine Market

The size of the global vineyard in 2016 was around 7.5 million hectares of area under vines. Area under vines refers to the land used for the production of wine grapes, table grapes or dried grapes that are in production or available for production. Accordingly, five countries (Spain, China, France, Italy and Turkey) represent approximately 50% of the global vineyard. In contrast, New Zealand vineyards represent around 0.5% of the global vineyard.

The wine market is a truly global market, with the greatest concentration of producers coming out of Europe. Italy

dominates as the world's largest producer of wine, with the France as a close second. It is not surprising that Europe dominates the market. However, demand side shifts are becoming central to the supply side responses by producers.

Global wine production (Top 5 producers incl. NZ)



New Zealand ranks as 15th on the global production scale, specialising mainly in white wines. On an area basis, 79% of New Zealand vineyards support the production of white wines, with Marlborough and the Hawke's Bay contributing around 80% of the total producing area. In particular, Sauvignon Blanc represents around 76% of the white wines produced. Global supply metrics show that white whites tend to be the most widely consumed and thus more heavily produced.

However, observable food consumption trends suggest room for growth in red wine production. Red wine accounts for 21% of the total producing area, with Pinot Noir representing 72% of the output. In general supply developments, especially in New Zealand, the industry is calling for greater diversification across the product mix. Demand for wine will largely shape this mix; however, given current industry structure, there is room for greater growth in red wine production.

The US remains the world's largest consumer of wine. Recent data details that on a per capita basis, US consumers drank around 11 litres of wine in 2016, with 3.6 billion litres consumed in total. The interesting development on the demand side is the growing demand for wine in Asia, most importantly China. The growing middle class and general consistency in the outlook for the Chinese economy has shown an exponential rise in the demand for premium goods, especially in terms of agricultural products.

Wine industry reports strongly suggest that given the current Chinese wine consumption trends, China will become the second largest consumer of wine by 2020. On a per capita basis, Chinese wine consumption is relatively low to the US and other consumers. However, the sheer size of the market suggests that the total value of sales could exceed US\$21 billion by 2020.

This surpasses the value of both France and the UK, which are in the top 10 of global wine consumers. Furthermore, industry experts are forecasting China to become the world's largest consumer of still wines, i.e. non-sparkling wines by 2020.

Wine has a significant global presence. The consumption of finer foods has a higher income elasticity, which means that under firm economic conditions, the consumption of these goods tends to rise. With a notable firmness in the global economy, there is an upside to the market for wine. Moreover, with a generally firm outlook for the New Zealand economy – see more in our August 2017 Economic Overview - there is scope for further investment across vineyards to productivity growth.

This growth potential supports the case for pushing for better trade arrangements for the Asia region and potentially for the US as well, which will be a key destination for New Zealand soft commodity exports going forward. In general, given the current path of expansion, there is strong potential for the wine industry to play a larger role in New Zealand's rural economy over time.

Shyamal Maharaj

Economist

GlobalDairyTrade Auction Results, 16 August 2017

	Change since last auction	Price index USD/Tonne
Anhydrous Milk Fat (AMF)	-1.2%	\$6,199
Butter	-1.3%	\$5,735
Butter Milk Power (BMP)	n.a.	n.a.
Cheddar	1.4%	\$4,005
Lactose	-4.9%	\$747
Rennet Casein	2.9%	\$6,255
Skim Milk Powder (SMP)	0.3%	\$1,968
Whole Milk Powder (WMP)	-0.6%	\$3,143
GDT Price Index	-0.4%	

Payout Forecast Table

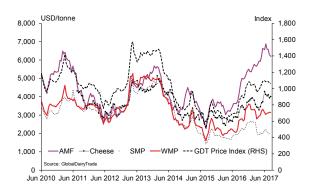
	2016/17	2017/18	
	Fonterra	Fonterra	Westpac
Milk Price	\$6.15	\$6.75	\$6.50

Beyond the farm gate

Dairy

		Current price level compared to 10 year average	Next 6 months
	Trend	Average	7

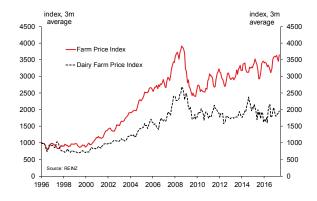
Last night's GlobalDairyTrade auction saw a mild 0.4% decline in the overall price index, with lower prices across most products. The result went against some of the recent optimism in the market (for instance the NZX dairy futures implied a 4% rise in prices), but was in line with our outlook for the rest of this season. Milk production has picked up among the major exporters (including New Zealand) and has scope to rise further, which could put some downward pressure on prices in coming auctions. Our farmgate milk price forecast for this season remains at \$6.50/kg.



Land prices

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

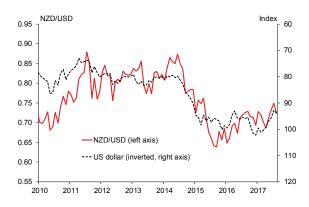
The REINZ farm price index rose in July, to be up 9% on the same time last year. However, price estimates are being drawn from a dwindling number of farm sales. Prices for arable land and finishing farms have been picking up in recent months, but declining for orchards. Dairy farm prices have been relatively static, despite improving conditions for the industry. The improved milk price forecast for this season will give buyers some confidence, although sales between existing farmers may be limited as they focus on debt reduction.



NZ dollar

	Current price level compared to 10 year average	Next 6 months
Trend	Above Average	7

The New Zealand dollar has sustained its recent strength against. the US dollar, although this strength has been primarily a US story. Uncertainties on the Trump administration's policies and the spate of softer US economic data have halted the gains in the USD. On the domestic front, we see the OCR staying on hold until the end of 2019, while the US is likely to raise interest rates further in this time. This will help to narrow New Zealand's interest rate spread over the US and reduce the appeal of the NZD.



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 Shyamal Maharaj, 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').

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 vield 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"), Anv 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

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

Disclaimer continued

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 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
- (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. selfregulatory 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.