

RED MEAT

Trends, outlook and implications
for New Zealand farmers.

July 2024



EXECUTIVE SUMMARY

Globally, red meat consumption is growing. Per capita consumption has been trending lower in high-income countries but is rising elsewhere. Changing relative prices and customer preferences are leading to some substitution into other types of protein.

China is the big swing factor that drives consumption of beef and sheep meat. Other markets, like the US and EU provide a stable source of demand for red meat.

New Zealand is a bit player in beef markets, but we are still the world's second largest exporter of sheep meat despite our small production.

Low beef and lamb prices and higher input costs have put the squeeze on farm profitability. That's likely to remain the case over the remainder of 2024, despite slightly higher world prices.

Profitability should be slightly better in 2025 but will remain under pressure. While world prices for red meat are expected to increase, much of this is likely to be undone by a stronger NZ dollar. Meanwhile, farm input cost inflation is set to remain at current levels.

Thereafter, profitability should improve significantly. That is likely to reflect much stronger world prices for red meat, contained input costs (including lower debt servicing costs) and a more stable NZ dollar.



Paul Clark, Industry Economist

+64 9 336 5656 | +64 21 713 704

paul.clark@westpac.co.nz

The global red meat market	3
Production drivers	4
Consumption: Macro-drivers	5
Consumption: Micro-drivers	6
New Zealand: Production and consumption	7
New Zealand exports	8
Red meat prices	9
Input cost inflation trends	10
Outlook for input cost inflation	11
Farmgate profitability	12

THE GLOBAL RED MEAT MARKET

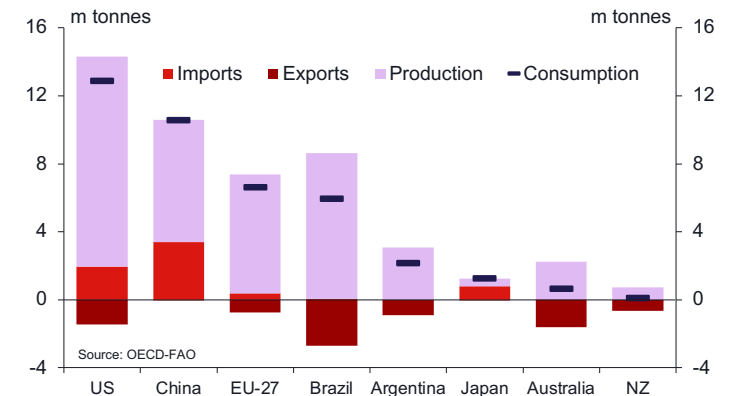
China, US and Brazil dominates beef.

- The US is the world's largest producer and consumer of beef. It is also the largest importer, as well as the second largest exporter, after Brazil.
- China is the world's third largest producer of beef. A sizeable growing middle class means it is also the world second largest consumer of beef.
- EU is both a big producer and consumer of beef but does little trade.
- Brazil is a big producer and heavily reliant on exports into China and the US.

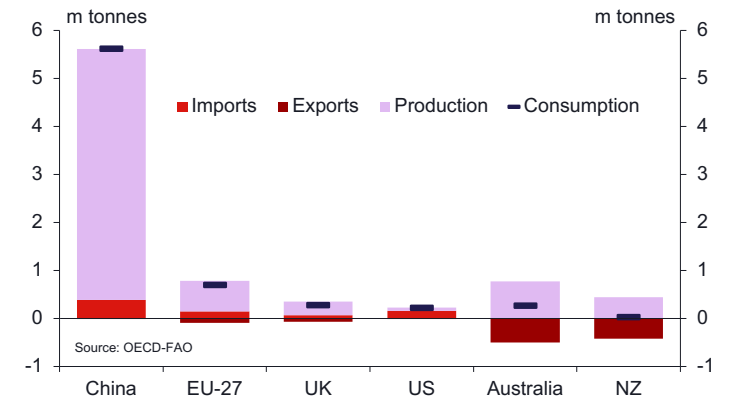
China dominates lamb.

- China is by far the world's largest producer and consumer of sheep meat. It is also the biggest importer. While small relative to domestic production, China's imports equate to New Zealand's entire production.
- The US is the world's second largest importer of sheep meat, importing about half of what China does.
- The EU-27 and UK imports small quantities to fill production gaps.
- Australia is the world's second largest producer and the biggest exporter.
- New Zealand is a small producer but is the world's second largest exporter.

Beef – production vs consumption (2023)



Sheep meat – production vs consumption (2023)



PRODUCTION DRIVERS

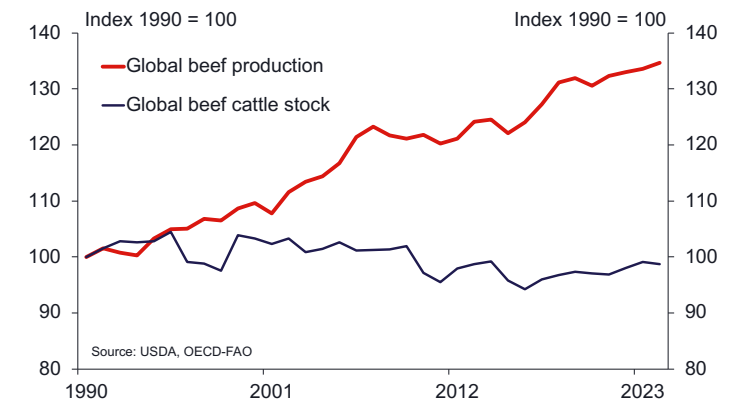
Global beef production continues to track higher.

- Beef production continues to rise in line with global population growth.
- However, the number of cows to service that production globally has trended lower over time.
- That reflects productivity gains, both at the farm and processor level in key producing countries.

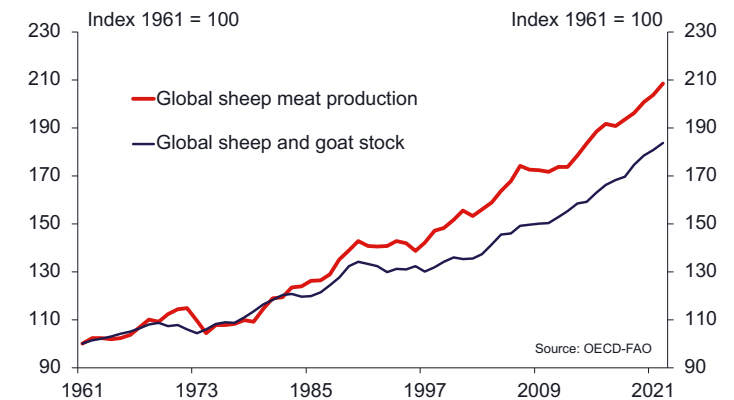
Global lamb production is really a China story.

- Lamb production is largely driven by capacity expansion in China. Production in that country has grown strongly as its middle class has expanded.
- In contrast to beef, global sheep stock levels have also increased. Again, that is mainly due to an increase in the Chinese flock.
- That said, increases in output have still outpaced changes in flock size, reflecting productivity gains.
- However, whereas productivity gains in beef have trended higher over time, the pattern for sheep meat production has been less consistent, growing more strongly in the three decades ending 2010, and moderating thereafter.

Beef – production vs stock levels



Sheep meat – production vs stock levels



CONSUMPTION: MACRO-DRIVERS

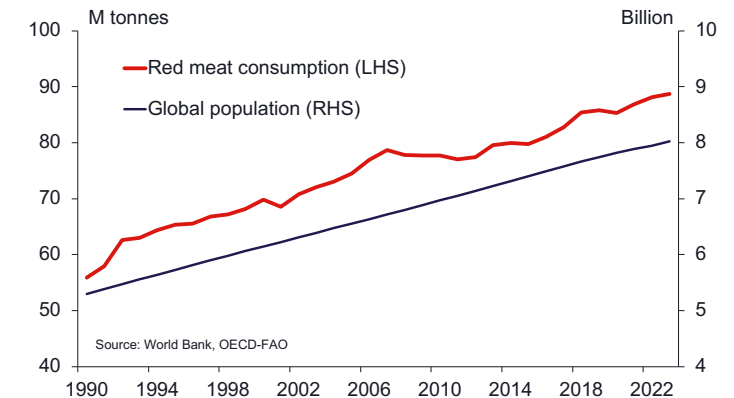
Global consumption of red meat continues to increase.

- Changing demographics and population growth continue to drive global consumption of red meat at the aggregate level.
- Global sheep meat consumption is growing twice as fast but still only equivalent to about 1/4 of beef consumption by volume.

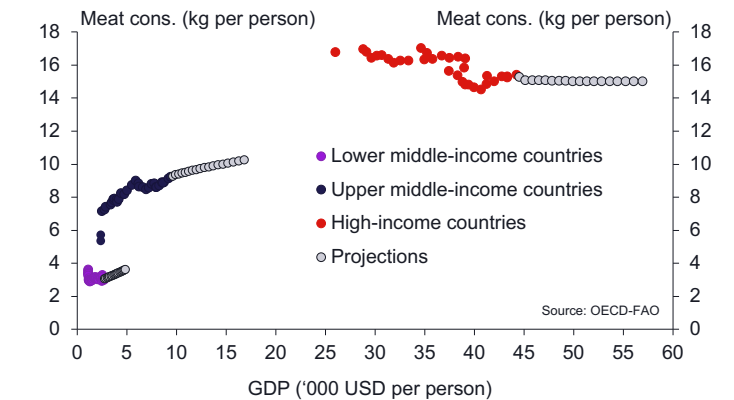
Per capita consumption trends are diverging.

- Consumption growth in low to middle income countries is outstripping that of high-income countries.
- In low-to-middle-income countries, growth in per capita red meat consumption is positively correlated to per capita GDP growth.
- The opposite seems to be true for per capita consumption in high-income countries.
- Irrespective, changes in per capita sheep meat consumption reflects a stronger relationship with per capita GDP growth than beef consumption.
- In both country groups, per capita consumption of cheaper substitutes like poultry exhibit a positive correlation with per capita GDP growth.

Red meat consumption vs population



Red meat consumption vs per capita GDP

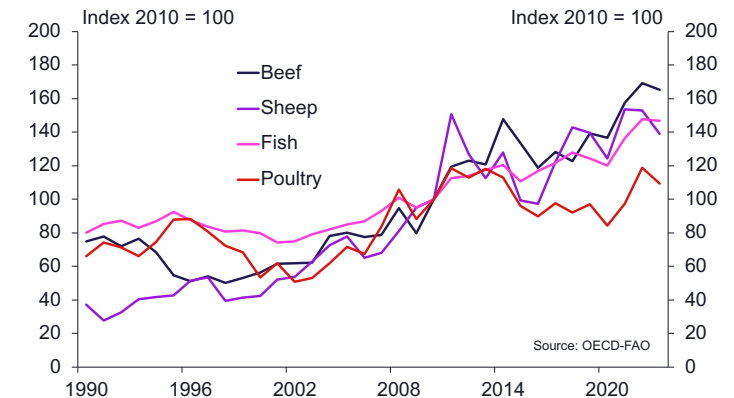


CONSUMPTION: MICRO-DRIVERS

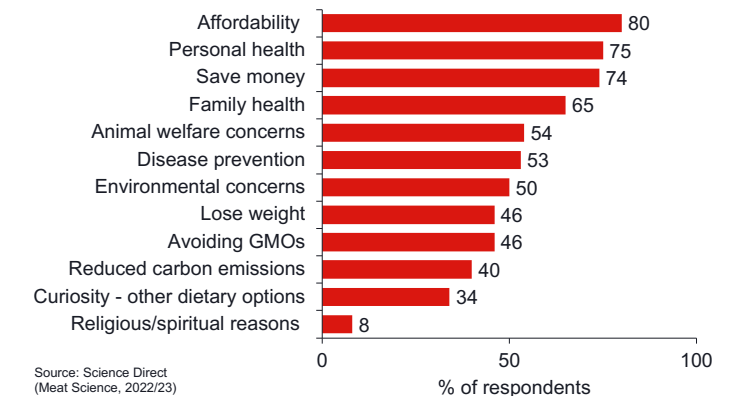
Customer preferences are shifting.

- Attitudes towards red meat are driven by several factors:
 - **Psychological** – lifestyle values, attitude and beliefs, expectations, and socio/cultural factors
 - **Marketing** – relative prices of competing proteins (including poultry, and pork), branding, labelling and convenience
 - **Sensory** – taste, appearance, colour and aroma
 - **Health** – heightened risk of heart disease, cancer, diabetes associated with the high intake of red meat
 - **Production** – animal welfare concerns, traceability from farm to fork, use of antibiotics, growth hormones and GMO animal feed
 - **Environmental** – carbon emissions, climate change and environmental sustainability
- The weightings of these factors differ according to income. Irrespective, considerations such as affordability and health are universal.

World prices for competing proteins



Factors that influence meat consumption



NEW ZEALAND: PRODUCTION AND CONSUMPTION

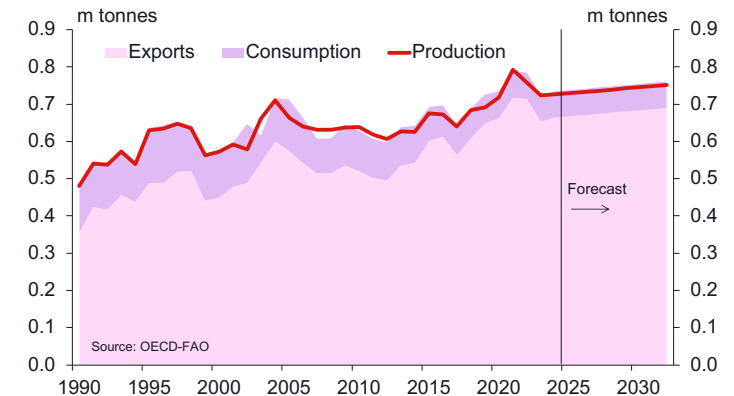
Beef production is growing, mostly driven by export demand.

- Despite a decline in a herd size, beef production in New Zealand continues to track higher. That reflects changes in breeding practices, producing cows with higher average weights and higher feed conversion efficiencies.
- Domestic consumption continues to track lower, reflecting the same pattern of decline that is evident in other high-income countries.
- With that set to continue, New Zealand's beef farmers are likely to become increasingly reliant on export markets.

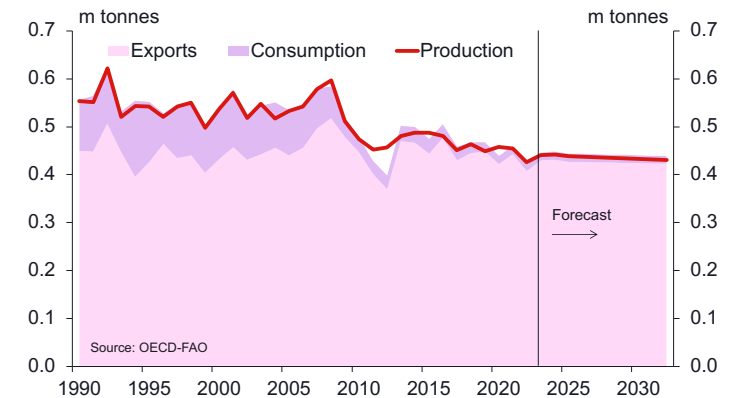
Sheep meat production has trended lower over time.

- That reflects a long-term decline in sheep numbers, following the removal of farming subsidies in the 1980s, falling returns to farmers and changes in land use into dairy.
- It may also reflect declining domestic consumption, which follows a pattern of decline seen in other high-income countries, notably the EU and UK.
- More recently, exports have struggled in the face of stronger competition from Australia. A reversal of the long-term decline in sheep numbers has allowed Australian farmers to flood the market with cheap lamb.

NZ beef production, consumption & exports



NZ sheep meat production, consumption & exports

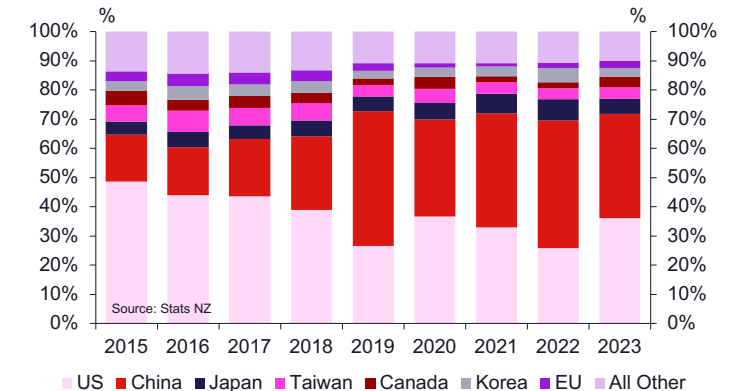


NEW ZEALAND EXPORTS

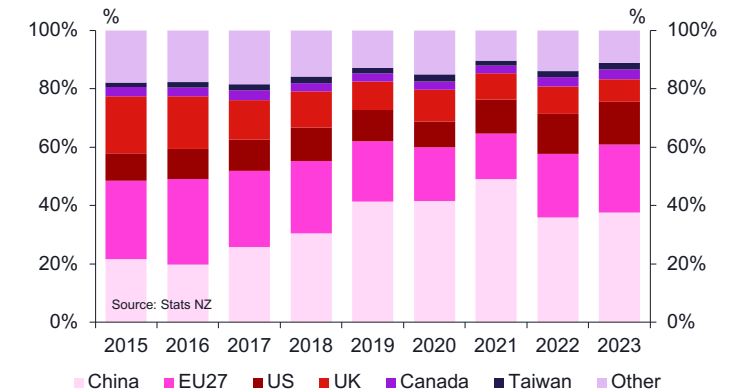
China is the big swing factor for now.

- New Zealand's primarily exports to high-income countries, where per capita consumption of beef and lamb is falling.
- That said, China is New Zealand's largest single export market. Its share of red meat exports has risen, as per capita consumption has grown.
- Per capita consumption of beef in China has accelerated over time as incomes have risen. Chinese consumers view beef as a premium product. By contrast, per growth in capita consumption of lamb has slowed. Imports tend to be lower quality cuts where price is the key to purchasing decisions and competition from cheaper pork is strong.
- New Zealand is a major exporter of lean beef trimmings (typically Lean 90CL or 95CL) to the US where it is mixed with lean/fat ground beef from domestic grain fed cattle. Looking forward, the US is expected to continue providing a stable source of demand for beef.
- The same can be said for lamb exports to the EU/UK although that may change given improved market access under recently concluded FTAs.
- From a growth perspective, China matters. Chinese consumption of red meat is set to grow but at an ever-slower pace, as growth in its middle class slows, customer preferences align more closely with those in high-income countries and population growth turns negative.

NZ beef – share of exports by market



NZ sheep meat – share of exports by market

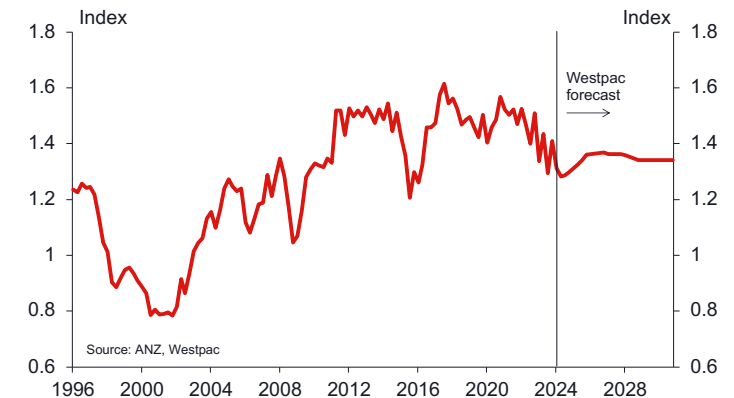


RED MEAT PRICES

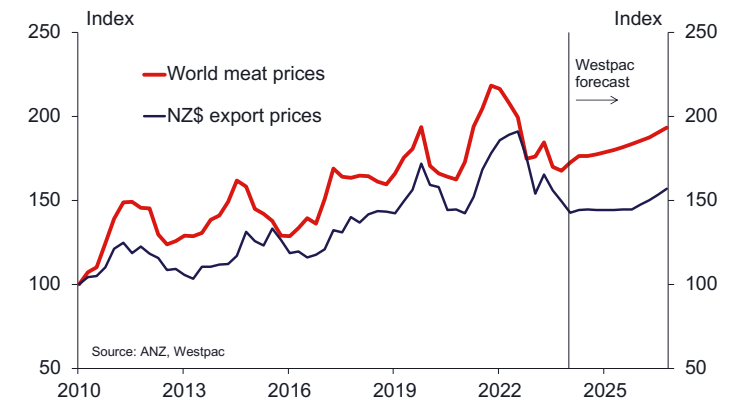
A stronger NZD should dampen higher world red meat prices.

- The NZD/USD will likely trade around current levels in the near term. However, the US dollar will likely come under downward pressure once the Fed starts to ease policy – likely from around September. This will place upward pressure on the NZ dollar.
- World prices for beef and lamb to move slightly higher from current levels.
- Beef prices should be supported by ongoing demand from the US over the remainder of 2024, with some offset coming from weak consumer demand in China. This offset should start to reverse in 2025, providing some additional support to beef prices.
- Sheep meat prices will reflect the additional supply of Australian lamb on world markets and still weak consumer demand in China for the remainder of 2024. In real terms prices are at decade lows and should pick up as these factors begin to reverse in 2025.
- Key here will be a reduction in the Australian sheep flock in 2025 and 2026, following high slaughter rates in prior years.
- A strengthening NZ dollar is likely to dampen the impact of rising world prices for most of 2025. With the exchange rate expected to remain stable, local prices should begin to rise in late 2025, gathering pace in 2026.

Commodity weighted NZD exchange rate



World and NZ red meat prices



INPUT COST INFLATION TRENDS

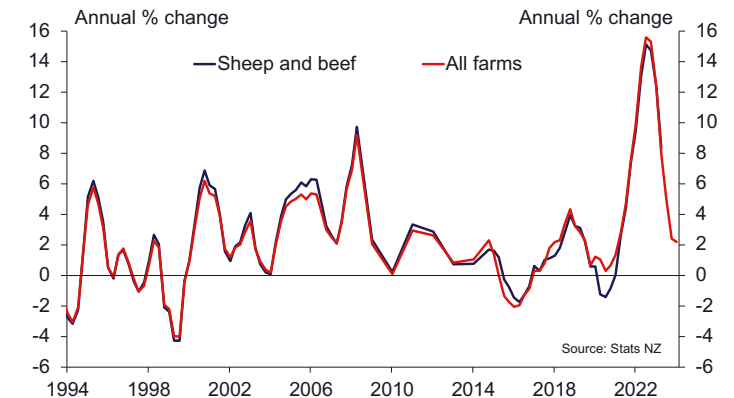
Farm input cost inflation has moderated.

- Annual farm input cost inflation (excluding livestock) sheep and beef sector has come off the boil, rising 2.5% over the year to March 2024.
- That's well down from the peak of 15.6% in the year to September 2022.
- That said, input costs are almost 28% higher than they were prior to the pandemic, underpinned by high costs for fuel and debt servicing.

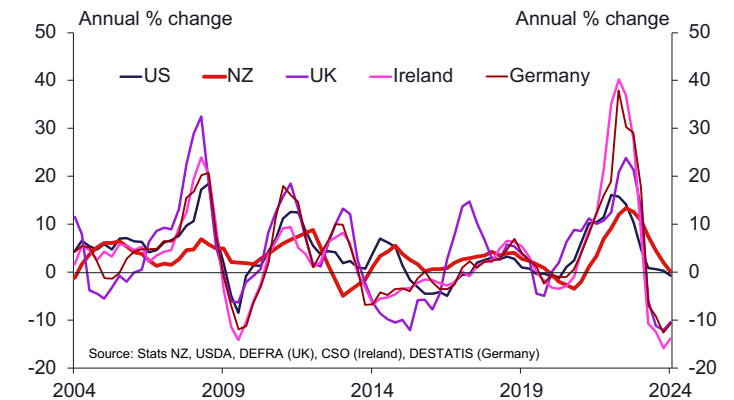
Similar, but different patterns are evident in other countries.

- The recent drop in input cost inflation in New Zealand is mirrored in other countries.
- However, many of these countries seem to experience much greater variability in input cost inflation than New Zealand.
- That likely reflects differences in cost structures that result from different farming practices. For example, farming in New Zealand requires hardly any supplementary feeding and housing, whereas in the EU and the UK, soil conditions and harsher weather conditions result in a need to sometimes house stock indoors, which adds to cost.

Farm input cost inflation (excluding livestock)



Comparative farm input cost inflation (all inputs)



OUTLOOK FOR INPUT COST INFLATION

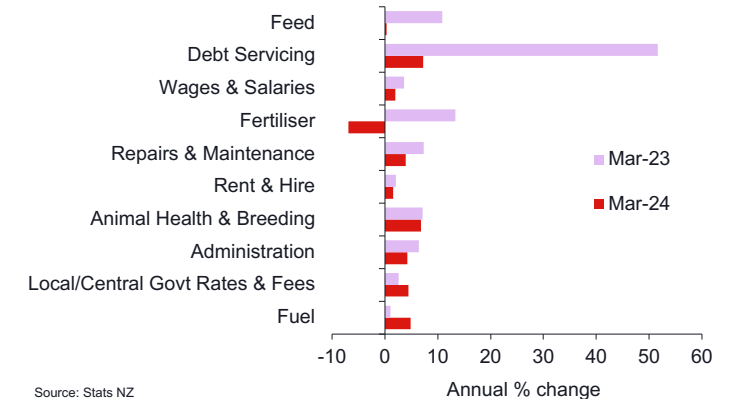
Slowdown in input cost inflation has been broad based.

- Annual rural cost inflation slowed modestly in the March 2024 quarter, with mixed performance across the major expense categories.
- Feed costs, previously, impacted by the war in Ukraine and geopolitical events in the Middle East, have now flatlined.
- Debt service costs, a key driver of rural cost inflation, have slowed to about 7% from over 50% a year earlier

Farm input costs to be contained in coming years.

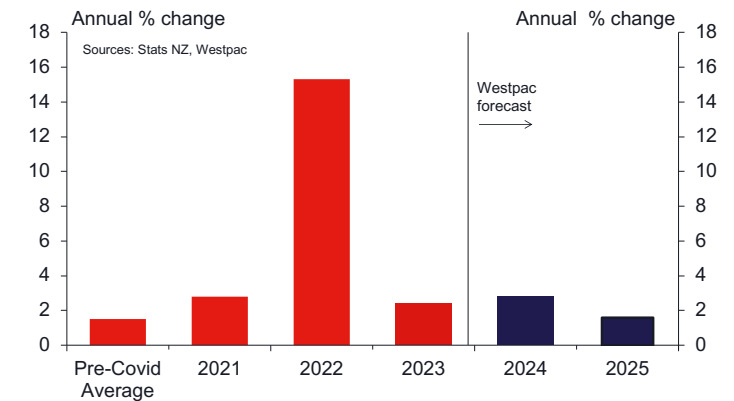
- We expect costs to rise by around 2.8% in 2024, after falling to 2.4% in 2023. The slight pickup in 2024 reflects the impact of higher insurance and administered costs.
- Ongoing disruptions to freight traffic in the Red Sea, pushing up freight costs, present an upside risk for rural cost inflation over this year.
- Input cost inflation should slow in 2025 due to an ongoing easing in the labour market, slowing wage growth, and perhaps more importantly (given its high weighting in the farm input cost index), a decline in debt service costs, which are set to turn negative as interest rates fall in 2025 (and 2026).

Farm input cost inflation by expense category



Source: Stats NZ

Outlook for farm input cost inflation

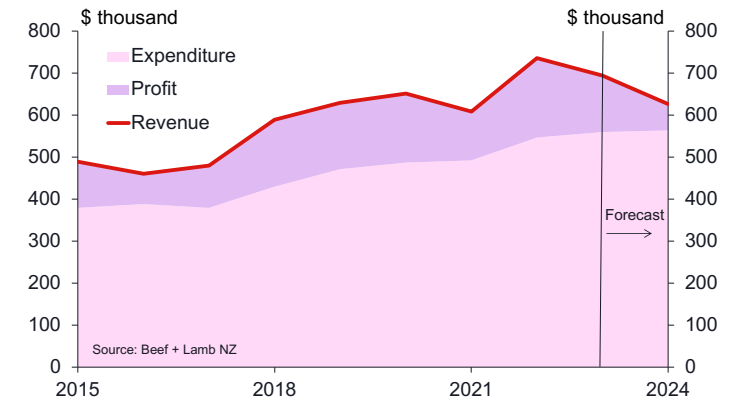


FARMGATE PROFITABILITY

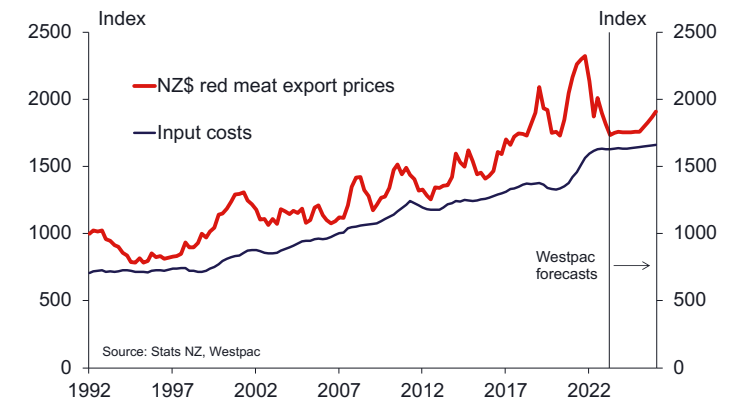
Profitability under pressure for the next year, improving thereafter.

- Supply/demand fundamentals suggest that world prices for red meat will edge only higher over the remainder of 2024.
- With cost structures up almost 28% on pre-Covid levels, that is likely to mean profitability will remain under pressure for the remainder of 2024.
- World prices for red meat are likely to be stronger in 2025, although much of this will likely be undone by stronger NZ dollar.
- Profitability is likely to remain under pressure in 2025. Key here will be the timing and extent of the eventual decline in interest rates, as debt servicing carries a heavy weighting in the farm expenses index.
- Assuming a broadly stable NZ dollar, profitability is expected to improve significantly in 2026. Much of that will have to do with an increase in world prices as consumer demand in China gathers momentum.
- Input cost inflation is also likely to remain contained over the period, especially if interest rates continue to fall as we expect.
- Longer term, profitability should move back to sustainable levels, as less efficient farmers with high-cost structures are squeezed out, and prices reflect a resulting rebalancing of global demand and supply.

Beef + Lamb NZ financial forecasts



Red meat prices and farm input costs



CONTACT

Westpac Economics Team
westpac.co.nz/economics
economics@westpac.co.nz

Kelly Eckhold, Chief Economist
+64 9 348 9382 | +64 21 786 758
kelly.eckhold@westpac.co.nz

Satish Ranchhod, Senior Economist
+64 9 336 5668 | +64 21 710 852
satish.ranchhod@westpac.co.nz

Darren Gibbs, Senior Economist
+64 9 367 3368 | +64 21 794 292
darren.gibbs@westpac.co.nz

Michael Gordon, Senior Economist
+64 9 336 5670 | +64 21 749 506
michael.gordon@westpac.co.nz

Paul Clark, Industry Economist
+64 9 336 5656 | +64 21 713 704
paul.clark@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.

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 licence and is subject to supervision by the Hong Kong Monetary Authority. Westpac Hong Kong branch also holds a licence 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 and Insurance Regulatory Commission (CBIRC). 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 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.



Westpac Banking Corporation.