Westpac

Agribiz

December 2010

History never repeats?

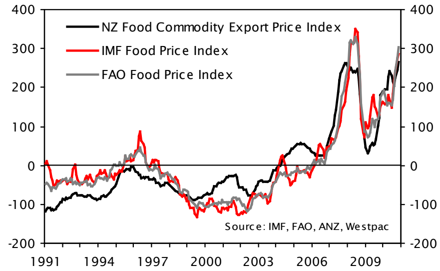
- Global food prices are on the rise.
- But there's not yet the same sense of panic that marked the 2007/08 period. Prices of key staples are not yet as extreme.
- Volatility will continue but on average we think higher food prices will be sustained for a while yet.
- On balance, this is good news for New Zealand's economy.

Global food prices have been rising strongly in recent months, prompting some to ask whether we are headed for a repeat of the global food crisis of 2007/08. Indeed, some aggregate measures of wholesale food prices are already at (or very close to) these highs. However, balancing this, key food stocks are not as low and, to-date, oil prices are not at such extreme levels.

Although the current episode is not as extreme as 2008, strong demand growth from Asia and developing economies looks set to outpace increases in global supply for New Zealand's key food commodity exports for the next few years at least – translating to higher world prices on average. Around this trend, volatility in food prices is set to continue. Unforeseeable weather-related supply disruptions will no doubt mean prices spike higher at times (indeed these are part of the story supporting the current level of prices), while periods of increased supply will weigh on prices. However, recent experience suggests the strength of fundamental demand should limit the downside. Given this background, food security concerns will continue to be important, particularly for developing economies. While some lessons have been learnt, government policy continues to have the potential to be an important factor in global food market dynamics.

For "New Zealand Inc", higher food prices imply an income boost via an improved terms of trade. Quite simply, this means more money flowing into New Zealand. In turn, high commodity prices tend to push up the value of the NZD. This means greater purchasing power for New Zealanders importing goods and services from abroad, but dampens farm gate returns. It also squeezes out import competing manufacturers and exporting industries who are not receiving higher international prices for their products. Although a net food exporter, consumers in New Zealand pay a world price for most food products and are likely to face higher food prices, as will consumers around the world.

Figure 1: Food price indices and NZ export prices (normalised)

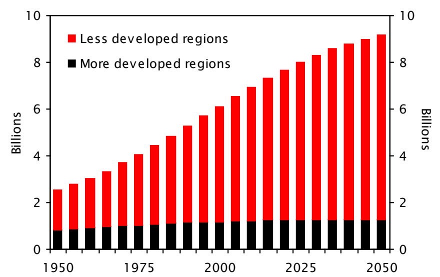


Demand

We think the increase in demand for New Zealand's key food commodity exports will outpace increases in international supply over the next few years, putting upward pressure on average world prices. In agricultural markets, the most important fundamental drivers of demand are population and income growth. Intuitively, the more people there are, the more food they demand. Similarly, the more people earn the more food they can afford and the higher the quality of the food they choose to consume – especially if they are poor. Global population growth over the next 40 years will be driven by less developed countries. In the coming years, these countries are also broadly expected to be those driving world growth (and hence experience the largest increases in incomes).

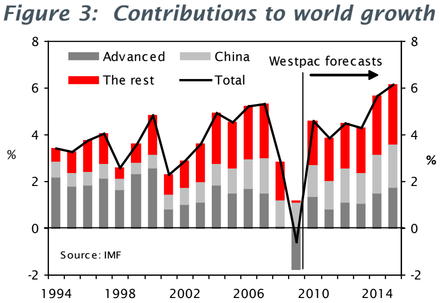
According to UN estimates, world population is set to increase from 6.9 billion now to 9.1 billion in 2050 *(Figure 2)*. By then, currently less developed countries will comprise around 86% of the world's population with China and India's population alone making up around 38% of this. Westpac estimates developing countries will comprise the lions share of world growth over the next few years *(Figure 3)*.

Figure 2: Population estimates



Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat

Figure 3: Contributions to world growth

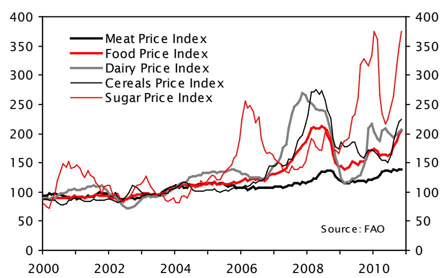


Not only are developing countries expected to grow more quickly, but increasing incomes in the developing world translates to a greater increase in demand for food commodities relative to developed countries. That is, in low income countries demand for food tends to be much more sensitive to changes in income than in high income countries.

Recent research suggests this effect is magnified when looking at luxury foods such as meat and dairy. In China, it is estimated that a 1% increase in household expenditure will increase demand for meat and dairy products by more than 1% (estimates are 1.15% and 1.12% respectively). This is much higher than in developed countries, where a 1% increase in expenditure translates to much less than a 1% increase in spend on these products (comparable estimates for the US put the figure at 0.11% for meat and 0.12% for dairy). The upshot is, income growth in developing countries has a bigger impact on demand for New Zealand's key exports than income growth in the rich world.[1]

The strength of demand from developing Asian economies was evident in the aftermath of the global financial crisis. While commodity prices fell sharply, the post-GFC lows were generally much higher than during previous recessions and in many cases higher than the 2005-07 average levels – a period of strong global growth.

Figure 4: Food price indices



But although aggregate food price indices are only a whisker away from historical peaks, it feels as if global food markets are perhaps not yet in as an extreme position as 2008. Concerns about food prices and security are simmering but have not yet erupted into the widespread civil unrest in the developing world seen in 2008 – possibly because staple food prices (cereals, rice etc) are not yet back to their previous peaks.

Grain prices have higher weight in food consumption than in a trade weighted basket, and consequently, indices weighted by global consumption rather than trade have not risen as strongly. The UN Food and Agriculture Organisation's (FAO) global food consumption price index reached a 24 month high in October but was still around 20% below 2008 peaks, relative to the food price index which was 9% below. Rice prices alone have risen over 2010 but are around 40% below 2008 peaks.

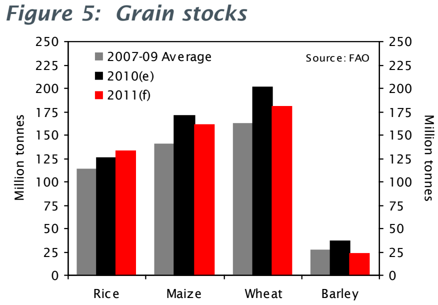
Stock levels is one factor that may be containing these prices. Key food stocks are not as low now as previously.

Cereal stocks (million tonnes)

	Stocks ending in		
	2007-09 average	**2010(e)**	**2011(f)**
Asia	284.1	335.4	343.7
Africa	28.7	32.7	31.7
Central America	5.2	4.9	4.7
South America	15.4	14.8	16.4
North America	67.4	89.4	60.1
Europe	52.6	68.9	48.4
Oceania	6.1	6.3	7.5

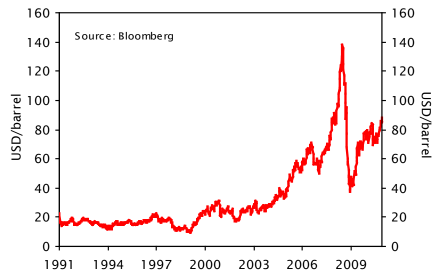
Source: FAO

Figure 5: Grain stocks



In addition, despite rising strongly in recent weeks, oil prices are still in the order of 38% below their 2008 peaks *(Figure 6)*. Lower oil prices mean fewer incentives for farmers to change production focus from food crops to feed stocks for biofuel production. Lower oil prices also imply lower oil-based input costs of production e.g. fertilisers and transport costs. That said, this relief may be temporary. These costs have increased significantly in recent months and could easily continue to move higher if strong demand is sustained.

Figure 6: Dubai crude oil



Recent experience means there is now a greater awareness of spill-over effects and tradeoffs implied by policy incentives designed to encourage biofuel production. Policy interventions initiated to encourage the production of biofuels can be sizable and saw the USA spend US$5.8 billion on biofuel subsidies in 2006 while the EU spent US$4.7 billion.[2] Indeed, policy changes more broadly, including measures designed to insulate consumers from rising global prices, can have big impacts on commodity markets – in both directions.

The 2007/08 run-up in food prices prompted governments to intervene in order to limit the impact of price rises on consumers. These interventions had varying degrees of success at limiting price rises for domestic consumers but in some cases likely contributed to higher world prices for traded product. By insulating consumers from higher prices, any incentives for consumers to adjust their behaviour (reduce consumption, substitute toward alternatives) are removed, likewise, producers aren't incentivised to increase production. Interventions which include export bans restrict producers' ability to take advantage of higher global prices, further restrict global supply, and tend to push prices higher. Consequently, conventional economic wisdom tends to argue that food prices should be allowed to rise, transmitting market signals and provide targeted safety nets for the poor and most affected.[3] Of course, the greater the increase in relative food prices, the more costly many of these policies become to implement.

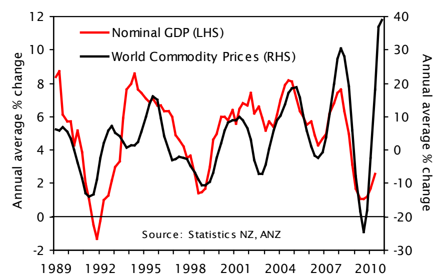
But in agricultural markets, increasing supply in the short term is possible only to some extent. For example, US producers with their well developed infrastructure and supply chains might be able to respond to high dairy prices relatively quickly (although higher feed prices will provide a headwind, USDA expects US dairy production to be around 1.4% higher in the coming season). But a production response from those who require significant investment to change land use and get up to speed will take longer. In the case of dairy, the most significant increases in production long-term are likely to come from developing countries themselves.

NZ impact

History suggests the net effect of a terms of trade improvement is stronger GDP growth *(Figure 7)*, but higher commodity prices tend to manifest as a higher NZD. This in itself confers NZ consumers with greater purchasing power, but squeezes out import competing firms and non-commodity exporters, increasing reliance on the agricultural sector.

Higher global food prices also means New Zealand consumers will be facing higher domestic food prices, as they did during the previous global food price spike (although imported food costs will be offset by a stronger exchange rate). Yet, as a developed country, New Zealanders spend a relatively small proportion of their income on food (food comprises around 18% of the CPI compared to China where they make up around one third) meaning a more muted inflationary impact than in less developed countries. Combined with the income benefits of being a food exporter, this means New Zealand is less vulnerable to higher food prices than others. Indeed, we are at a global extreme in this respect. In a recent article Nomura calculated a food price vulnerability Index comparing countries' vulnerability to increasing food prices.[4] Amongst 80 countries assessed, New Zealand was judged the least vulnerable (Bangladesh the most). As a large net food exporter, higher world food prices are a positive for the New Zealand economy.

Figure 7: Commodity prices and GDP



[1] Zhang, W., D. Law *"What drives China's Food-Price Inflation and Hoes does It Affect the Aggregate Inflation?"* Hong Kong Monetary Authority, Working Paper 06/2010.

[2] FAO, *"The state of agricultural commodity markets 2009"*.

[3] Jones, D and A. Kwiecinski (2010) *"Policy responses in emerging economies to international agricultural commodity price surges"* OECD Food, Agriculture and Fisheries working paper No.34

[4] *"The coming surge in global food prices"*, Nomura Global Economics and Strategy, September 2010

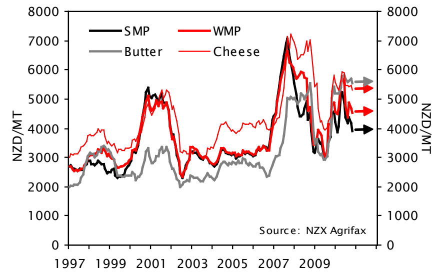
NEW ZEALAND DAIRY INDUSTRY AWARDS TRUST

Beyond the farm gate

Dairy

Dairy prices rebounded strongly in the second half of 2009. Although now down from their mid-2010 peaks, prices have remained well supported given a backdrop of increasing global supply. This robust demand has contributed to Fonterra revising up its forecast milk payment from $6.30 to $6.60 kgms – if realised, this would contribute to Fonterra's second highest payout in its history. Good news on global prices has been offset by growing drought fears domestically. Northland has been declared a medium-level drought zone, and there are similar fears for other parts of the North Island, including Waikato. We hope current predictions of a wet January come to fruition, but we have significantly scaled back the overall increase in production we had previously pencilled in. In the US, higher feed costs will likely curtail producers' ability to respond to higher prices via large scale herd increases. But even with the headwind, the USDA expects higher herd productivity to lift production by 1.4% in 2011 relative to last season.

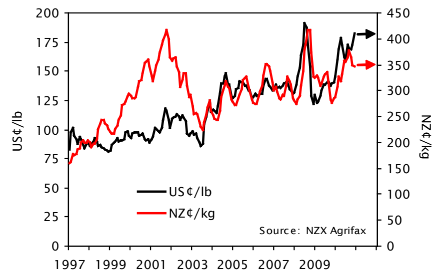
Dairy prices



Beef

NZD beef prices have held up well given the strong currency and weak western consumer markets. Looking ahead, global production in the near term is likely to be constrained by feed costs and shrinking herds. Weak consumer outlooks in the US and Europe continue to pose downside risk to prices, while a weak USD has increased the competitiveness of US beef exports. Increasingly, diversification of NZ export markets beyond the US and toward Asia is apparent.

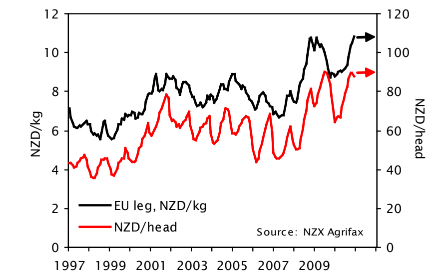
Beef prices



Lamb

The national lamb crop was hit hard by atrocious spring weather. Beef and Lamb New Zealand estimate 10% fewer lambs tailed this season compared to last year. Where able, farmers are attempting to offset lamb losses through increased weights. In Australia (the other big producer) rainfall in key areas has allowed producers to retain lambs for longer, again restricting near-term supply; although this should reverse to some extent later in the season as lambs make it to market. Yet despite global supply remaining tight, it is difficult to see prices rising much further given a weak European consumer and high import costs.

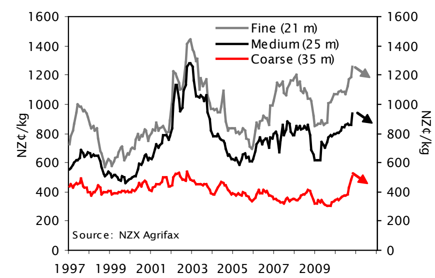
Lamb prices



Wool

Wool prices have been the standout of 2010. During the 11 months to November, strong wool (35 microns) prices have surged by 47%, while fine wool prices (18m) are up 41%. Demand has been fairly broad based with buyers from countries including China, India, UK, Middle East and Western Europe. This demand has run down stocks built up during the global financial crisis leading to good competition from buyers for new stock. In recent months, longer term issues around the structure of the industry have been brought to the forefront by Wool Partners Co-operative's bid for commitment from growers supplying at least half the national strong wool clip. This has generated much discussion within the industry, and the eventual outcome will no doubt be watched closely by other sectors currently debating the merits of a single seller cooperative structure.

Wool prices



Forecast Key:
General pace and direction of prices expected over the next 12 months

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