



Rabobank

Re-entering Agflation

World Food Prices to Hit Record High



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Luke Chandler
luke.chandler@rabobank.com

Nick Higgins
nicholas.higgins@rabobank.com

Rabobank International

Agri Commodities Market Research

**Food & Agribusiness
Research and Advisory**

**agrimarketsresearch@rabobank.com
www.rabotransact.com**

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Executive summary

Skyrocketing agricultural commodity prices are causing the world to re-enter a period of agflation, with food prices forecast to reach new record highs in 2013.

- Agricultural commodity production has plunged as droughts in the US, South America and Russia have diminished crop prospects and tightened already low inventory levels.
- The social impact should be different to 2008 as this time around crop shortages are affecting feed intensive crops such as corn and soybeans, rather than core food staples such as wheat and rice.
- Food security remains a highly sensitive issue in many regions, and we expect to see a return of government interventions, which could exacerbate food and commodity price volatility.
- The rally in grain and oilseed prices will have a significant knock-on effect to animal protein industries and other processing supply chains—raising prices for meat consumers and challenging processor margins around the globe.

Food price inflation is once again accelerating, triggered by the worst drought the United States (US) has seen in nearly a century and exacerbated by droughts in South America and Russia. Rabobank analysis suggests world food prices may reach an all-time high in Q1 2013, peaking in Q3 2013 (see *Figure 0.1*). In order for demand rationing to take place and encourage a supply response, prices will need to stay high

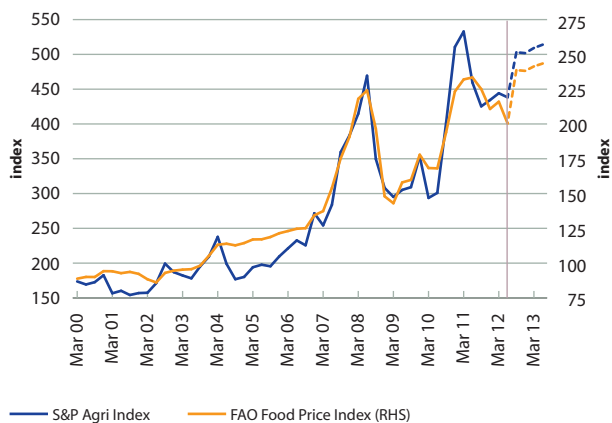
and, consequently, we expect agricultural commodity prices—particularly for grains and oilseeds—to remain at elevated levels for at least the next 12 months.

This time around, the most affected commodities are largely used in animal feed and are not core food staples of the world's developing economies. This is a very different scenario from that in 2008, when declining wheat stocks and several national bans on rice exports limited the amount of grains available for direct human consumption. We estimate that world corn (soybean) stocks will fall to only 51 (73) days of use at the end of 2012/13, compared to 62 (83) days in 2007/08, whereas wheat and rice stocks are expected to improve over the same period (see *Figure 0.2*). Stocks of core food staples, such as rice and wheat, are forecast to comprise a larger share of total grain and oilseed stocks in 2012/13 at 61 percent versus 53 percent in 2007/08. As a result, while corn and soybean prices are at record highs, wheat and rice prices are more than 30 percent lower than their 2008 peaks.

A more subdued non-food inflationary environment will result in less social pressure from rising food prices this time around. Non-food inflationary pressure relative to 2008 will also be reduced by weaker global growth, lower energy prices and reduced freight costs. However, as in 2008, increased government stockpiling, trade restrictions and other forms of intervention remain a significant threat as governments look to abate the local effects of higher international prices.

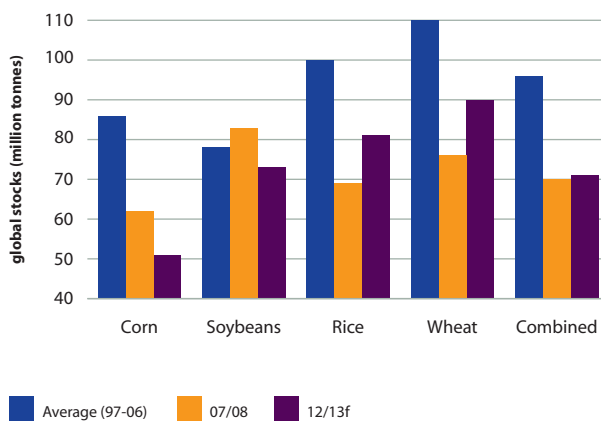
The impact of higher grain and oilseed prices will be significant for the animal protein and dairy sectors as they are likely to be squeezed by higher feed costs. The long production cycles of the animal protein and dairy industries will have lingering effects on global food prices as herds (especially cattle) take longer to rebuild—maintaining upward pressure on food prices. The full effect of this commodity price rally and the subsequent lower meat and milk output, will be a multi-year rebuilding of herds, which will sustain high price levels of these products. Meanwhile, effects on the beverages and value-added products (VAP) sectors will be more muted as grains and oilseeds constitute a smaller part of the overall production costs.

Figure 0.1: Rabobank forecasts that the FAO Food Price Index will hit new record highs in early 2013



Source: FAO, Rabobank, 2012

Figure 0.2: Soybean and corn inventories are set to decline to lower levels than 2008, while wheat and rice are more abundant



Source: USDA, Rabobank, 2012



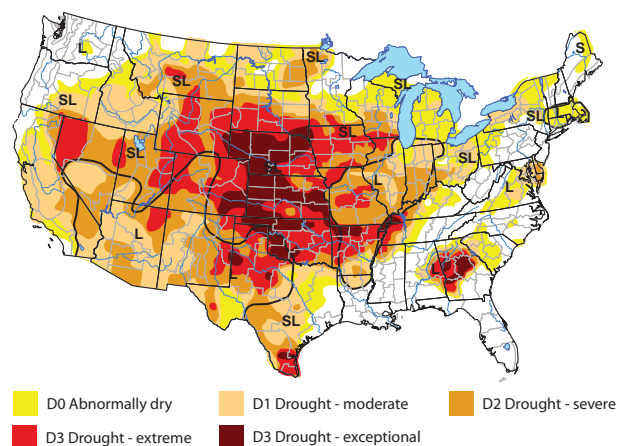
1 The price of food will increase further

The coming year will likely see the world economy re-enter a period of agflation as grain and oilseed stocks decline to critically low levels, pushing the FAO Food Price Index above record nominal highs set in February 2011. These high food prices have been triggered by droughts in several key growing regions, led by the 2012 US drought, the worst since 1936. At the end of August, severe (or worse) drought conditions covered over 42 percent of the US mainland (see Figure 1.1). As a result, 2012/13 grain and oilseed production is likely to see a reduction of over 8 percent YOY, from already depressed levels. Despite higher planted acreage, this year has also seen a drought in Russia as well as La Niña-related dryness, which impacted the harvesting of South American crops in

Q1 2012. These impacts, combined with a less certain outlook for Australian grain production, have accelerated the trend of decreasing inventories across the grains and oilseeds complex and pushed agricultural commodity prices near record highs. Global grain and oilseed stocks are now forecast to decline for the third consecutive year, and higher food prices are still needed to meet the clear and present need for a reduction in global demand.

Our modelling suggests that the FAO Food Price Index will rally another 15 percent from 31 August 2012 levels to 243 points by 30 June 2013 (see Figure 1.2). July readings of the index saw a 6 percent increase after prices had fallen during the previous four months, although the index stagnated in August.

Figure 1.1: Drought conditions in the US are the worst since 1936, the Dust Bowl era



We expect future gains in the FAO Food Price Index to be faster in the near term, with food prices expected to rally 12 percent from 31 August levels by the end of 2012 and growth slowing to 2 percent for the first half of 2013. Peak aggregate food prices, according to our current estimates, should therefore occur during the Q2/Q3 transition in 2013.

Fundamentals remain much tighter than current official market estimates, with existing food price records, set in 2011, likely to be broken as the severity of the situation becomes clear. As a result of droughts in key exporting countries and rapid demand growth in developing countries, the combined global wheat, rice, corn and soybean stocks-to-use is expected to fall to 19.6 percent in 2012/13—only 0.4 percent above 2007/08 levels. Combined stocks-to-use for these key commodities had fallen 14 percentage points in the eight years to 2007/08. Although the timing of price changes remains uncertain, we believe that the FAO Food Price Index provides a useful proxy for prices paid by world consumers for food, and gives an indication of how agricultural commodity prices may translate into prices at the local shop. The model uses our house forecasts for commodity futures prices, futures curves for livestock prices, and momentum factors to anticipate future changes.

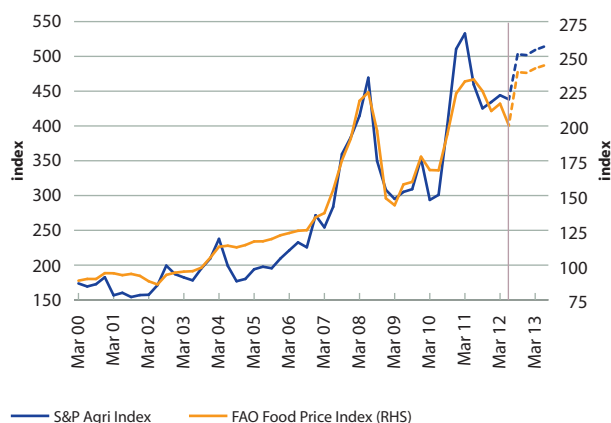
Meat and dairy prices, which comprise 52 percent of the FAO Food Price Index, are the primary drivers of our forecast for further food price increases (see Figure 1.3). The price of pork, demonstrated by the lean hog futures curve, is expected to rally 31 percent from spot prices by 30 June 2013. Cattle ready for slaughter (CME Cattle) and cattle ready

for placement onto feed lots (CME Feeder Cattle) are expected to increase by 6 percent and 8 percent, respectively, over that same period. Price rallies in these markets lag those of grains markets due to the downstream nature of the industry, with animal protein companies needing to adjust to higher feed costs. This involves reducing the size of the animal herd, initially creating a supply glut, which then leads to higher prices as supplies drop. Dairy prices are expected to respond more quickly as herd reductions translate into higher milk prices on a shorter scale—although rebuilding dairy herds also has a long cycle, prolonging any shortage created. Grain and oilseed prices are not expected to be major direct contributors to further food price moves, with average grain prices increasing 6 percent by 30 June 2013, offset by falling CBOT Soybean prices, which we expect to fall nearly 12 percent over the same period. Divergence between grain and oilseed prices is driven by the relative importance of South America in the oilseeds complex, where a good harvest is expected to relieve some of the supply-driven price pressure.

Not a case of déjà vu for food prices: Why 2013 will be different to 2008

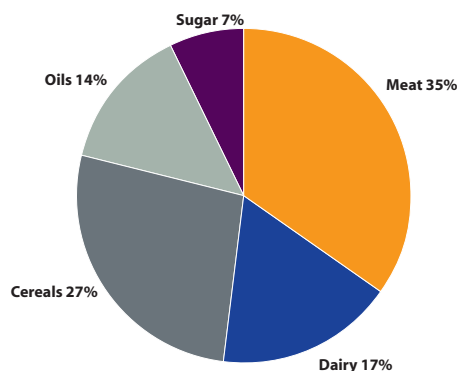
The spike in world food prices this year is expected to ration animal feed, unlike the staple grain shortage of 2008. We estimate that world grain and oilseed stocks will fall to only 71 days of use by the end of 2012/13, compared to 70 days in 2007/08. Despite the two events seeming similar, we expect social pressure for food availability to be lessened as consumers switch consumption from animal protein back towards staple grains—an option not available in 2007/08 due to severe shortages of wheat and rice.

Figure 1.2: The FAO Food Price Index is forecast to rise to new record levels in 2013



Source: FAO, Bloomberg, Rabobank, 2012

Figure 1.3: Meat and dairy prices comprise 52% of the FAO Food Price Index



Source: FAO, Rabobank, 2012

Our analysis indicates that world stocks of soybeans in the 2012/13 season will fall to just 73 days of use (-6 YOY) while corn stocks will fall to just 51 days of use (-4 YOY). These numbers compare to 83 days and 62 days, respectively, for the 2007/08 season. As this season's decline in stocks is concentrated in corn and soybeans (used largely in animal feeds), stock tightness can be alleviated through reduced meat and dairy consumption. These effects will be masked in the shorter term as higher slaughter rates temporarily increase meat supply. The longer term effect will be reduced animal herd sizes, which will drive down production and increase prices. Unlike in 2007/08, higher prices will linger this time, even if increased production alleviates pressure on underlying grain fundamentals as herds take time to rebuild.

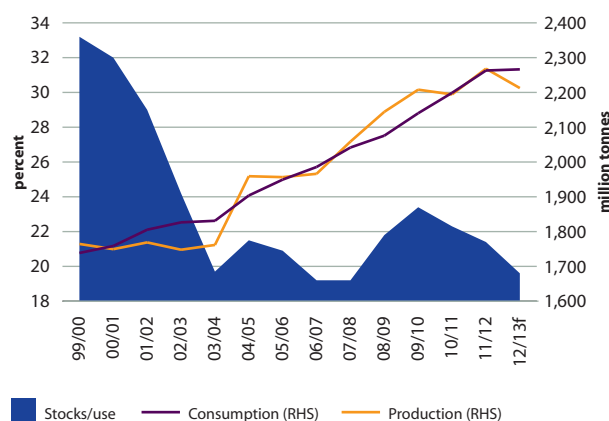
The crisis of 2008 was many years in the making, with stocks-to-use declining across the grains and oilseeds complex beginning in 2000 as emerging market and biofuel demand accelerated. The 2008 crisis was a signal that there was not enough growth in production or investment in agriculture to meet the accelerated growth rate in consumption. The subsequent price response incentivised the largest grain and oilseed harvest ever in 2008/09. However, the record crop was not sufficient to rebuild depleted inventory levels as consumption growth kept pace with production increases. Ultimately, prices dropped and output faltered in 2010/11, prompting another agricultural commodity rally. The coming decline in world grain and oilseed stocks reinforces the longer term trend of consumption surpassing production, with production only outpacing supply

in five of the thirteen marketing years since the turn of the millennium (see Figure 1.4).

In fact, world wheat stocks are expected to end this season with 90 days of use (-14 YOY) and should remain considerably higher than the 76 days of use reached in 2007/08 (see Figure 1.5). Rice stocks are also significantly more plentiful this time around with 81 days of use (-2 YOY) compared with just 69 days in 2007/08. Export bans in major rice exporting countries, including India and Vietnam, were a key component of the 2008 record rally in rice prices, with August 2012 rice prices of USD 15.6 per cwt still 34 percent below the 2008 peak. While there have been some concerns with the sub-par Indian monsoon, at this stage production has not been as adversely affected as in 2008. Additionally, non-grain and oilseed prices have remained more subdued, with sugar—a large food-price component—falling 16 percent YTD. However, with the reference #11 sugar price trading at USc 20 per lb, prices remain well above the 2008 average price of USc 12 per lb, with prices declining from their peak of USc 35 per lb in February 2010.

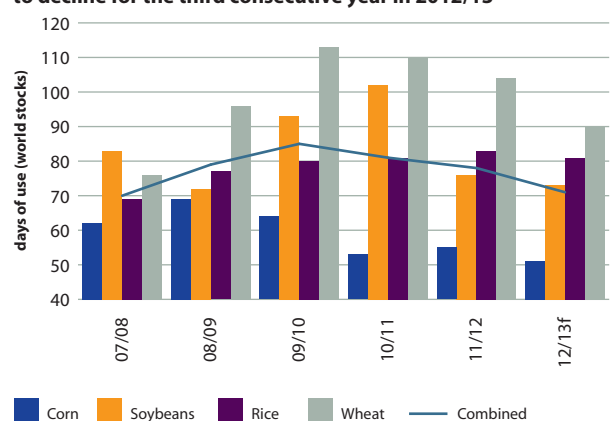
Meat consumption will be significantly more affected than the consumption of grain (e.g. bread) as demand rationing will be focused in the feed grains complex. One direct consequence of this, due to the long animal protein and dairy production cycles, will be that price effects will linger longer as herds (especially cattle) take longer to rebuild. As herds are liquidated this will increase supplies in the short term and depress prices. In the medium/longer term this will maintain upward pressure on food prices as meat and dairy supplies contract.

Figure 1.4: Combined world stocks-to-use for wheat, rice, corn and soybeans began to decline in 1999/2000



Source: FAO, Rabobank, 2012

Figure 1.5: Combined world stocks-to-use for wheat, rice, corn and soybeans improved following 2007/08, but are forecast to decline for the third consecutive year in 2012/13



Source: USDA, Rabobank, 2012

Low growth, lower oil prices and weaker consumer confidence levels are all likely to lessen the impact of higher food prices this time around. Persistent economic output gaps relative to pre-2008 levels have recently contained, and will likely continue to contain inflationary pressures. This is an important difference compared to 2007/08 as there was no output gap in that period and broadly based inflationary pressures drove food prices higher. The US dollar—the currency commonly used for pricing world grains—has depreciated 11 percent since its peak in late 2008, which also helps to alleviate the food price pressures of the first half of 2012 in importing nations. Crude oil prices are lower than in 2008, reducing bullish pressure on input costs such as fertiliser and fuel, which are highly related to energy prices, and therefore alleviating some pressure on agricultural commodity prices (see Figure 1.6). Despite this, some pressure remains, with a mild US economic recovery underway, strong emerging market growth, and geopolitical tensions in the Middle East inducing average prices of over USD 110 per barrel for Brent crude oil over the last 12 months. If economic growth picks up and oil prices rise, there could be further bullish pressure on agricultural commodity prices in 2013.

Regional effects: Asia, the Middle East and North Africa to slow demand

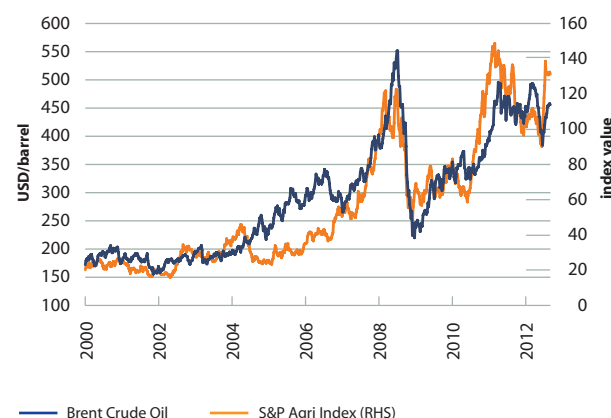
Rabobank expects that emerging market demand for animal proteins will be most affected by higher food prices. Although high prices will be felt chiefly in the meat and dairy sectors, and although the developed world consumes a disproportionate share of these products, food makes up a smaller share of developed world budgets with consumers less responsive to price changes. This means

that the share of global demand reduction will be proportionally larger in the Middle East, North Africa and Asia, where demand is more elastic and where lower incomes drive consumers to reduce animal protein and milk consumption in favour of staple grains (see Figure 1.7).

Higher prices will stall the long-term trend towards higher animal protein diets in developing economies. Rabobank expects the developing world—with its high demand elasticity, especially to meat—to ration import demand of grains, oilseeds and meat most heavily, leading consumption growth to slow and even recede for a period as prices rise. Ultimately, the extent of this season's price hikes for corn and soybeans is likely to reduce meat consumption growth in the coming years, moving counter to the longer term trend of increasing animal protein consumption. This is a form of demand rationing—as on a calorie-for-calorie basis meat and dairy products require multiples of grain inputs used in direct grain consumption—and will reduce pressure on global grain and oilseed balance sheets.

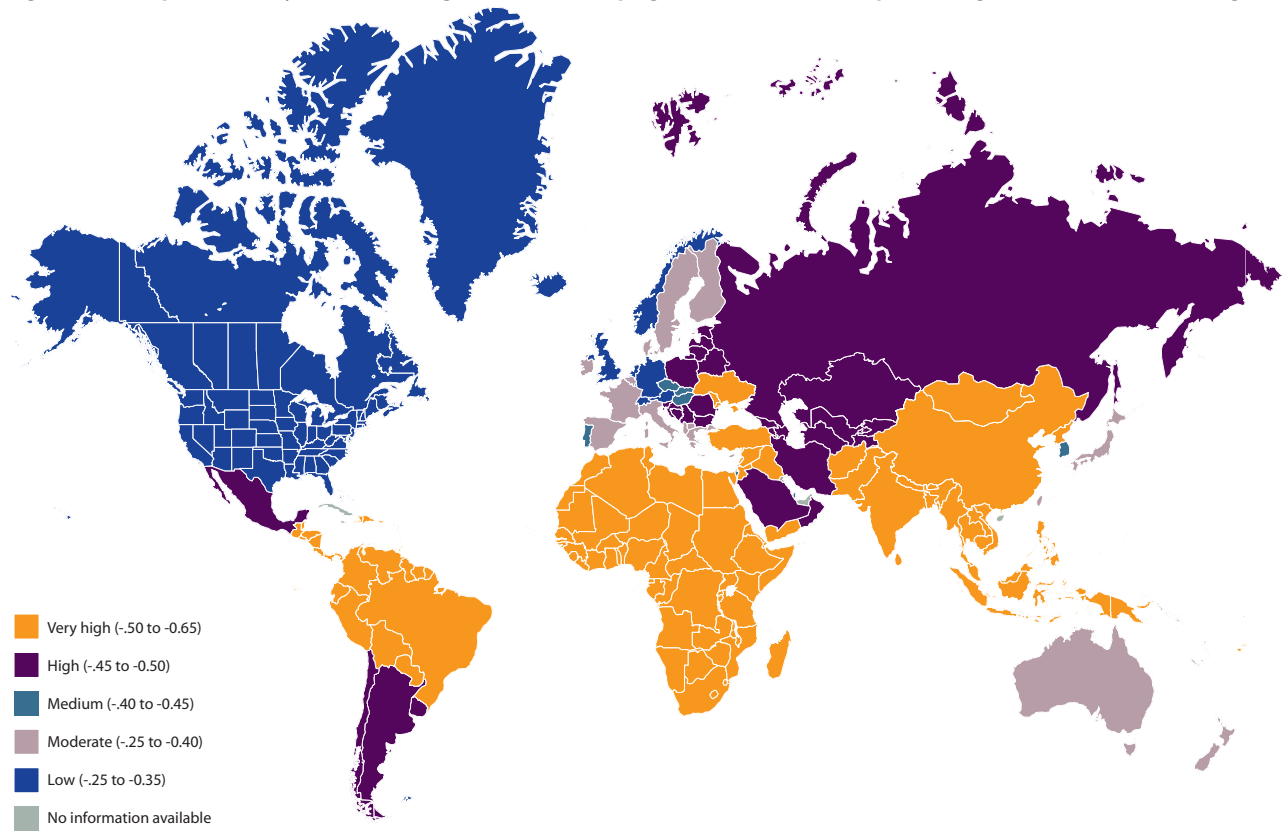
Meat demand reduction in the Middle East and North Africa is likely to cut grain imports 9 percent YOY in 2012/13. Meat price elasticity in these regions averages -0.5, in line with Asia, but likely understates the true sensitivity to price increases due to high income, small population states such as Kuwait. However, reduction in grain import demand in some countries (Morocco is one such case) will be limited by post-Arab spring wariness as higher prices for staple grains are commonly considered a key catalyst for the kind of unrest seen in recent years. In order to limit the risk of another period of widespread social unrest, governments in these regions

Figure 1.6: Agricultural commodity prices and energy prices remain strongly correlated



Source: Bloomberg, Rabobank, 2012

Figure 1.7: Meat price elasticity of demand is highest in the developing world where meat comprises a larger share of household budgets



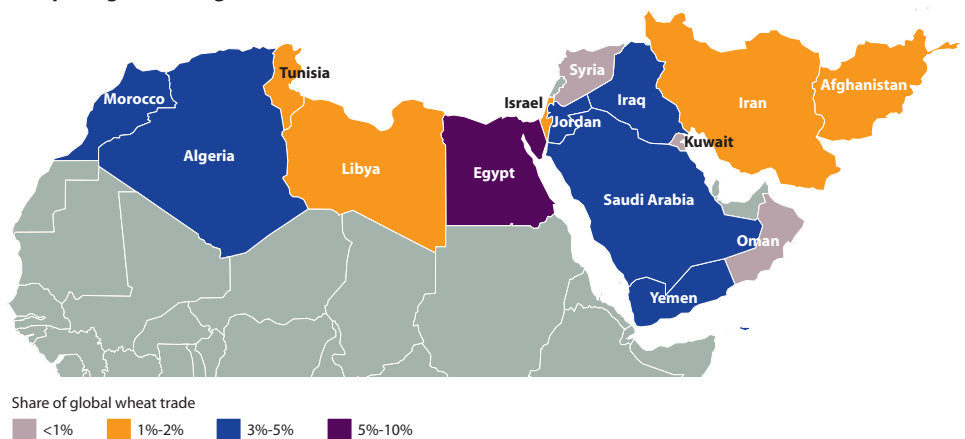
Source: USDA, Rabobank, 2011

may choose to keep domestic prices artificially low. Large hard-currency reserves, generally derived from oil export revenue, provide additional support for government purchases. Despite this, Rabobank expects the regions to import under 78 million tonnes of grain in 2012/13—the lowest amount since 2007/08. Imports would be even lower, but base import demand has been increased due to lower yields in 2011/12 in grain producing areas of North Africa. Although feed grain demand is likely to fall, we expect that staple

imports will remain supported with the region maintaining a share of nearly a third of global wheat imports (see Figure 1.8).

Asian demand is also expected to decline as increasing prices interact with high animal protein demand elasticity, with much of the region lacking protectionist policies. Although the region may move to adopt more protectionist measures (see pages 9 to 11) we believe that higher food prices will ultimately lower animal protein consumption, and therefore reduce meat imports.

Figure 1.8: The Middle East and North African regions rely heavily on grain and oilseed imports, comprising a third of global wheat trade



Source: USDA, Rabobank, 2012

Meat price elasticity averages -0.52 in South Korea, Vietnam, Malaysia and Indonesia. Even if governments undertake protectionist measures to encourage imports, as mooted by South Korea in early August, we expect that animal protein imports (chiefly those from the US) will fall as the US domestic animal protein sector is squeezed by higher costs. In this way, we see much of the decline in US feed demand, and subsequent meat production, ultimately falling on Asian consumption—tempering the recent trend of rapidly increasing US meat exports into this region.

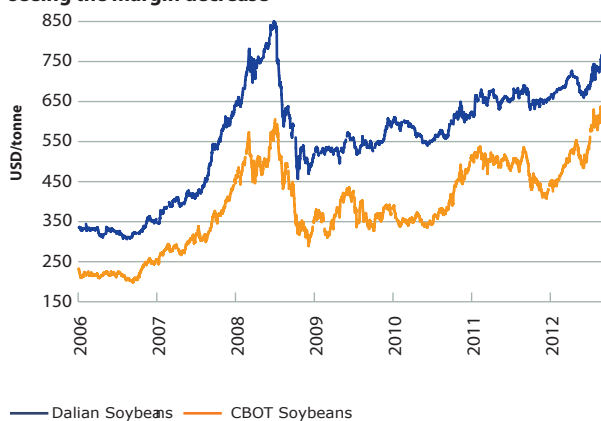
Demand rationing is expected to be limited in China, the world's largest net importer of food, with net imports of grains and oilseeds increasing to new record highs in 2012/13. This will see net imports jump 19 percent to 89 million tonnes in the 2012/13 marketing year, with soybean imports the chief driver of demand—although corn and wheat imports are also expected to increase. Soybean imports, of which China imports 70 percent of world trade, are expected to be 62 million tonnes in 2012/13, a 4 percent increase YOY. Despite higher prices, it is the government rather than consumers that will face international markets, muting the transmission of higher prices to the Chinese consumer. The Chinese government's ability to act quickly was exemplified by the 21 August announcement that China will redistribute commercial importers' unused 2012 quotas for wheat, corn, rice, sugar and cotton (there is no soybean quota). This signals the Chinese government's desire for imports to continue. Chinese domestic prices for corn and soybean have been above USD 8.00/bu and USD 16.00/bu, respectively, since early 2011. Therefore, the price shock

of the recent rally is expected to be more benign, with the recent rally in international prices seeing them gain (but not meet) higher Chinese prices (see Figure 1.9).

Domestic inflationary pressure will also be alleviated by falling asset prices as the Shanghai Composite Equity Index, down 14 percent from its May 2012 peak, is correlated, with a nine-month lag, to food price inflation (see Figure 1.10). This relationship between equity prices and food price inflation suggests that wealth effects may drive part of Chinese households' consumption behaviour. Lower perceived wealth may therefore temper growth in per capita meat consumption.

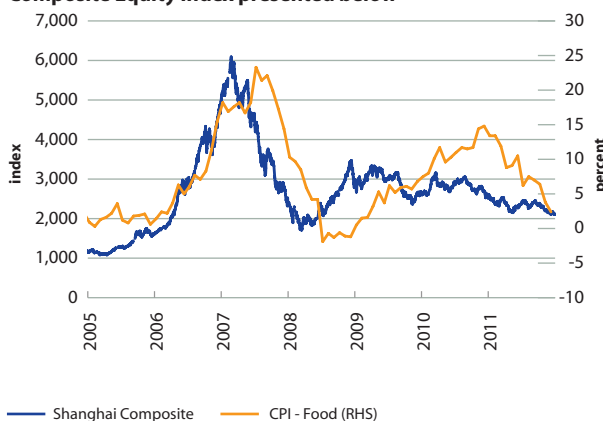
Demand from developed net importing areas is generally unresponsive to changes in food prices. Europe and Japan are the second and third largest importers of global grains and oilseeds, respectively. They are also the only developed economies included in the world's top 30 importers. Demand for grains in these countries is so inelastic that responsiveness to price changes is statistically zero—though higher meat elasticity is expected to result in some reductions in animal protein consumption. Despite low price elasticity, we expect demand in Japan and Europe will slow marginally, with importing end users acting to protect profits through stock drawdowns, but otherwise ultimately able to pass higher prices through to the consumer. However, longer term consequences of food price inflation may be particularly visible in Europe, potentially increasing pressure on governments to repeal bans on growing genetically modified (GM) crops or to reverse biofuel mandates. Stagnating economic growth provides additional support for this

Figure 1.9: Chinese soybean prices have long been higher than those in the US (and internationally) with the recent rally seeing the margin decrease



Source: USDA, Bloomberg, 2012

Figure 1.10: China's food prices are closely correlated to the performance of financial assets, such as the Shanghai Composite Equity Index presented below



Source: NBSC, Bloomberg, Rabobank, 2012

hypothesis as cost conscious consumers are more likely to react to higher meat prices, increasing the popularity of policies that increase grain production and reduce prices.

Rising feed costs will have a substantial impact on the US livestock industry but domestic meat consumption will be less affected. The US has the lowest meat price elasticity in the world, with consumption least likely to drop in response to higher prices. However, the effects on the US livestock complex will be extensive and, despite inelastic domestic demand, meat product exports are likely to fall. The US became a net exporter of animal protein in 2006, with rapid increases in Asian demand driving exports up by 14 percent per annum since (see Figure 1.11). Relatively inelastic demand in the US should see this trend reversed in 2013, with meat imports rising while exports fall as other countries are unable to afford the higher prices that US exporters will demand. This trend could be exacerbated by increases in grain stockpiling as other nations protect domestic industries and consumption, supporting US grain and oilseed exports while slowing the animal protein export complex.

Ultimately, we expect that the effects of higher global prices will be contingent upon the political sensitivity of higher price moves as well as the size of government foreign reserves. We believe that many of the largest importing countries will be able to stabilise domestic prices by implementing domestic procurement programmes, which could offset the effects of higher global prices and cushion domestic consumption. Grains, oilseeds and meat make up at least 20 percent of discretionary income in

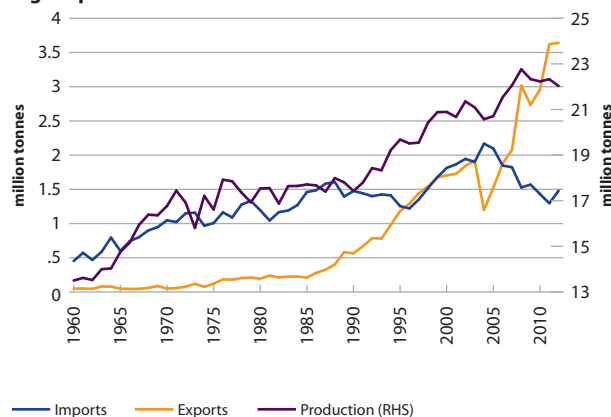
developing nations—a figure which expands to 27 percent once fish and dairy consumption are included—which means an increase in commodity prices will have a larger impact on household budgets in these regions compared to developed countries. With food comprising such a large share of spending, especially in Asia, increases in food prices could possibly have knock-on effects in demand growth of other commodities and consumer spending more broadly (see Figure 1.12).

Free markets are out the window when food prices are on the table

Increases in commodity stockpiling and other interventionist measures, such as export bans, are a distinct possibility in 2012/13 as governments react to protect domestic consumers from increasing world food prices. Rabobank sees Asian and Middle Eastern countries as the most likely first movers, with large foreign currency reserves and large portions of household expenditure exposed to food prices encouraging early action to protect social order (see Figure 1.13).

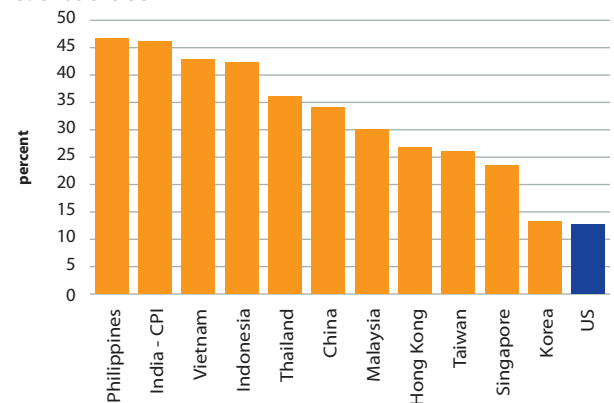
Increased government intervention will likely add to increasing world commodity and food prices with domestic stockpiles meaning that a larger portion of already low global stocks sits idle. We expect that localised efforts to increase stockpiles would be counterproductive at the global level, with those countries least able (or willing) to pay higher prices likely to see greater moves in domestic food price inflation. This is a vicious circle, with governments committing to domestic stockpiling and other interventionist measures earlier than usual—recognising the risk of being left out as exportable stocks decline further.

Figure 1.11: US pork, veal and beef exports should come under pressure as Asian importers reduce demand due to higher prices

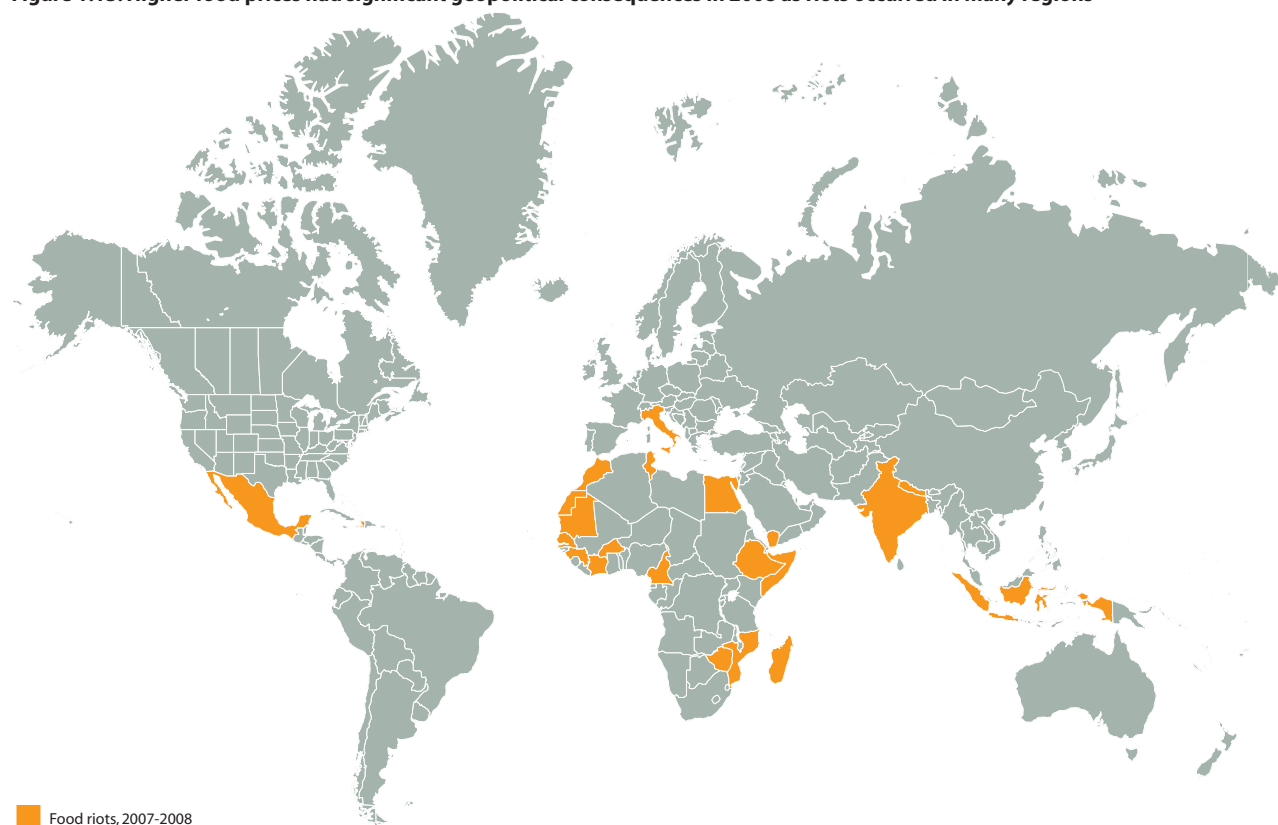


Source: USDA, Rabobank, 2012

Figure 1.12: Food comprises a much larger share of consumer budget in Asia than in higher income countries, such as the US



Source: Bloomberg, Rabobank, 2011

Figure 1.13: Higher food prices had significant geopolitical consequences in 2008 as riots occurred in many regions

Source: USDA, Rabobank, 2011

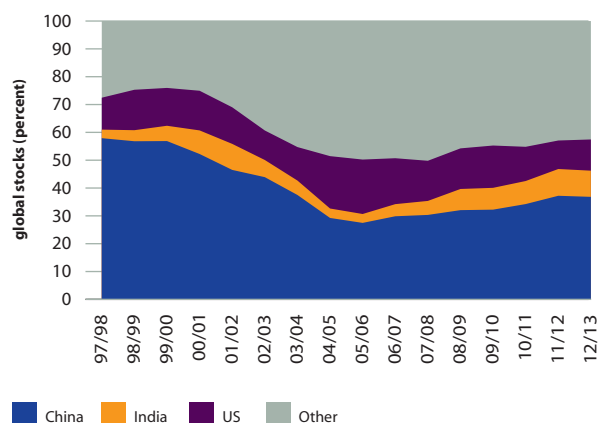
Russian export bans may not be imposed, but we expect the effects to be similar, with demand for exports in the Black Sea region outstripping available supplies for export. These pressures have risen again due to intense drought crippling Black Sea wheat production. Grain export bans, emanating from the Black Sea region—led by Russia—have historically been a threat to grain price stability, although recent comments by the Russian government suggest bans are unlikely in the near term. We expect that if export bans are not imposed by Russia, internal Black Sea region trade will grow to see Kazakhstani wheat moved into Russia in early 2013 to offset the rapid pace of Russian exports seen in Q3 2012. This will have an effect similar to an export ban: reducing the available Black Sea region surplus, albeit with lower near-term price volatility. This solution still means the market has to adjust to lower wheat supplies but delays the impact—kicking the can further down the road.

Rabobank has been monitoring several events that could be the beginning of a trend towards larger government purchases in 2013.

- A Mexican entity purchased the fourth-largest single order of corn ever from the US. A chicken import tariff was introduced in response to reported US dumping of chicken legs and thighs.
- South Korea is currently considering whether to introduce a domestic purchasing regime for grains and oilseeds.
- China's soybean purchases show little to no sign of slowing down, with 12 million tonnes of the 2012/13 US soybean crop sold—a 14 percent increase in new crop sales compared to this point in 2011.
- Iran—a country that is usually self-sufficient in wheat, importing only 0.5 million tonnes in 2010/11—has reportedly transacted several sales of over 1 million tonnes of wheat from both Pakistan and India, and purchases of rice and corn could follow, placing further pressure on global grain and oilseed balance sheets.
- Indonesia is repealing import tariffs on soybeans to protect domestic tofu processors, and has announced plans to increase grain stockpiles.

Expectations of further increases in food prices and high supply uncertainty will see competition for world food inventories increase, resulting in reduced stocks in major exporting countries. China and India have increased their shares of global stocks in the past five seasons in order to combat high domestic prices (see Figure 1.14). The increasing shares of China and India have come at the expense of US inventories; the US is forecast to have 11 percent of global stocks in 2012/13, down from 20 percent in 2005/06. As the scale of damage to the US corn and soybean crops becomes more apparent, Rabobank expects there will be a renewed tendency to increase domestic stockpiles in China, but this will be constrained by the low supply. As US stocks have continually fallen since 2005/06, and are now at pipeline levels for most grains and oilseeds, further increases in US exports to support stockbuilding in China are not possible. Chinese imports will have to originate from further afield, increasing competition and disrupting traditional trading partnerships. Other countries will therefore have to outbid incremental Chinese demand, placing further pressure on agricultural commodity prices. Given the high prices and low availability of exportable supply, we anticipate the Chinese share of global stocks will fall in coming seasons as their strategic reserves are drawn down.

Figure 1.14: The share of wheat, rice, corn and soybean stocks held by the world's largest countries has declined since 1999/2000



Source: USDA, Rabobank, 2012



2 Global agricultural prices spike, again

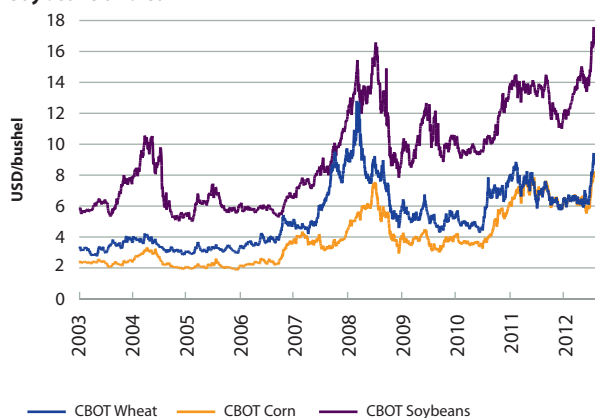
Global grain and oilseed prices are currently experiencing their third major rally in only five years as a combination of adverse weather and robust demand keeps global stocks at record low levels (see Figure 2.1). As often occurs in major agricultural price rallies, the trigger in 2012 has been a weather-induced supply shock. This has been supported by a sustained period of strengthening agricultural commodity demand; all the while, inventory levels have been unable to be replenished. Over the past five seasons, low grain and oilseed stocks have left the market without any buffer to adverse growing conditions. This is a short-term versus long-term problem, with the short-term supply response thus far unable to meet the requirements of longer term demand for feed grains to supply the animal protein consumption growth in emerging market economies and the rapid acceleration in world biofuel demand experienced over the past decade. Given the inability for prices to incentivise a sufficient supply response during these recent price rallies, we expect the 2012 price reaction will need to be strong and sustained.

The primary catalyst of the current agricultural price rally has been devastating droughts in the US, South America and Russia, which have slashed grain and oilseed production expectations. US corn production is now forecast to fall 29 percent below initial USDA expectations, a 14 percent decline YOY and the lowest level in nine years, despite record plantings this season.

Many comparisons have been made to the devastating drought of 1988, when corn production fell 31 percent YOY. However, according to heat and precipitation records, the damage to this year's crop may be even more severe. June to August precipitation and heat in the central US, where most of the US row crops are produced, is likely to result in the least favourable growing conditions seen since the Dust Bowl (peaking in 1936), and the third worst in over a century. Our crop modelling indicates that there may still be a considerable downside from current official production forecasts, which reflects our bias that prices are unlikely to have reached a high at this stage of the season. The market may still need to price in further reductions to output as well as a risk premium associated with the coming South American crops.

Production setbacks this season have not been limited to the US, with a number of key regions suffering adverse seasonal conditions in 2012. Widespread droughts in South America and Russia together with a sub-par Indian monsoon, disease issues in China and some dry conditions in Western Australia, have all negatively impacted world grain and oilseed production this season. We estimate that this season's adverse weather has slashed over 165 million tonnes from the global grain and oilseed balance sheet. Taken together with already tight stock levels coming into the season, this underscores the need for a relatively unprecedented amount of demand rationing in the global grains and oilseeds sector. Global corn consumption is likely to

Figure 2.1: Wheat, corn and soybean prices are experiencing their third major price rally in five years—setting records for soybeans and corn



Source: Bloomberg, Rabobank, 2012

decline YOY for the first time in 17 years. However, total global grain use is likely to exceed production for the seventh time in 14 years.

Agricultural commodity prices to remain high for some time yet

Record high agricultural commodity prices will be required over the next 12 to 24 months in order to cut demand and encourage a production response from the world’s farmers next season. We expect agricultural commodity prices will peak somewhere between Q4 2012 and Q1 2013 as new crop prospects in Brazil and Argentina are showing signs of trend line yields being achieved for corn and soybeans. Beyond this period, we anticipate an easing in prices if seasonal conditions normalise and world inventory levels can recover (see Figure 2.2).

However, we still expect prices to remain above long-run average levels, unless there is a major demand shock in the market, such as a major policy change (e.g. biofuels) or a global recession.

The scale of the production setbacks this season will underscore the need for an almost unprecedented amount of demand rationing. We believe that this will be a much more difficult task than current livestock and ethanol production margins would suggest. Entrenched demand, feedback effects from animal protein price increases, hedged production margins within the hog and cattle sectors and the US ethanol mandate (Renewable Fuel Standard-RFS) will likely mean that elevated agricultural commodity prices will be required for the entire marketing year and beyond in order to sufficiently limit both US and global use.

Figure 2.2: Rabobank quarterly average grain and oilseed price forecasts

		Q4'09	Q1'10	Q2'10	Q3'10	Q4'10	Q1'11	Q2'11	Q3'11	Q4'11	Q1'12	Q2'12	Q3'12	Q4'12	Q1'13	Q2'13
Wheat (CBOT)	US\$/bu	522	496	467	653	707	786	745	690	615	643	642	860	880	900	920
Wheat (Matif)	EUR/tonne	129	125	132	200	225	252	233	199	186	210	212	255	261	267	273
Corn	US\$/bu	386	370	355	422	562	670	731	696	620	641	617	790	800	810	820
Soybeans	US\$/bu	1,002	955	957	1,035	1,245	1,379	1,361	1,356	1,175	1,272	1,426	1,725	1,685	1,600	1,450
Soy oil	US\$/lb	38.1	38.6	38.1	40.2	51.0	57.0	57.2	55.7	50.6	52.9	52.2	53.0	52.5	52.0	51.0
Soymeal	USD/ton	306	278	281	305	338	367	353	352	302	339	413	510	490	420	375
Palm oil	MYR/tonne	2,309	2,577	2,527	2,650	3,293	3,675	3,362	3,097	3,016	3,219	3,245	2,850	2,900	3,000	3,100

Source: Bloomberg, Rabobank, 2012

Several key factors are likely to support US domestic demand, reducing world export availability and supporting prices into 2012/13 and beyond as global grain and oilseed stocks decline more than expected:

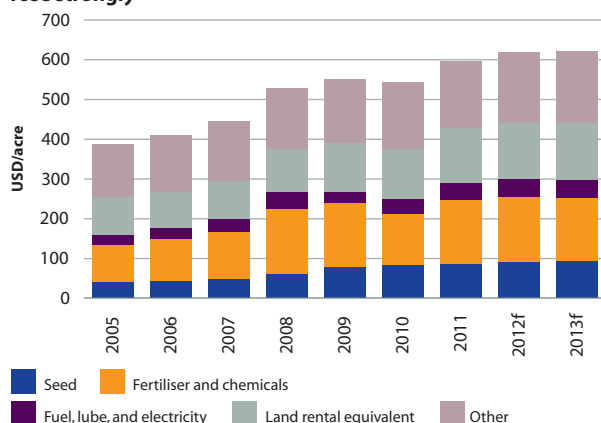
- US broiler egg sets are up 1 percent YOY, and chick placements are flat YOY as of 8 September.
- The US pork industry had the opportunity to use futures markets to lock in profit margins for 2012, which would likely shield margins from rising feed costs until 2013.
- US consumers are able (and historically willing) to pay high prices for animal protein. The USDA estimates that the US has the most inelastic meat demand of any country.
- Despite the US ethanol mandate, use is likely to prove inelastic even if the mandate is relaxed as oxygenate requirements and strong blending margins above USD 0.60 per gallon support demand.
- Declining corn use for ethanol production also detracts one-third of a bushel of distillers dried grains (DDG) feed for every bushel used for ethanol—intensifying soymeal and corn use in feed rations. We expect there to be a loss of 4.5 million tonnes YOY of high protein DDGs production in the 2012/13 marketing year.

The incremental cost of increasing agricultural output, which is vital to rebuilding global buffer stocks, is growing larger and supporting higher equilibrium agricultural commodity prices. Higher agricultural

commodity prices are needed to encourage improved production in South America, the Black Sea region and the US in the short term. High fertiliser prices, which are linked with stubbornly high energy prices, remain a key cost of production for agricultural commodities (see Figure 2.3). Other rising production costs, such as improved seed technology and rising land rents, will also prove to be increasing hurdles to farmer profitability, and will require higher prices as an incentive to invest in expanded production. Additionally, the bulk of potential acreage gains are in countries with high political risks, causing a larger risk premium to be associated with the investments required. Despite these opportunities to build production, it is unlikely that inventories will be substantially rebuilt in only one season, with consecutive seasons of favourable conditions and increased plantings required to alleviate the pressures of low inventory levels within the global grains and oilseeds complex.

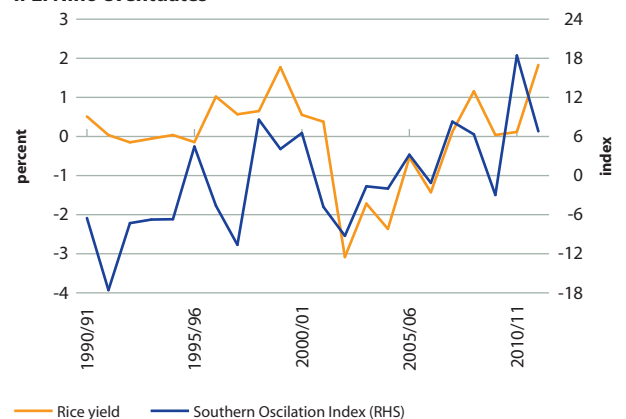
Weather risks remain, with intensifying concerns in Russia, India and Western Australia, supporting wheat prices and limiting the amount of wheat-for-corn substitution in global feed rations. Wheat substitution in feed rations has been a major mitigating factor to short corn supplies in the past 12 months. However, weather risks are threatening production in major wheat producing regions, namely Russia, where wheat production is now forecast to fall 30 percent YOY, albeit from record high levels. Given the magnitude of the wheat production shortfall in Russia, there are lower estimates of available export surpluses. Restrictions on exports are likely to come either in the form of a ban or Russia importing

Figure 2.3: Despite lower oil prices than in 2008, cost of US corn production remained higher as land rental and seed prices rose strongly



Source: USDA, Bloomberg, Rabobank, 2011

Figure 2.4: Substantial threats to rebuilding stocks from current levels remain, with rice yields likely to deteriorate if El Niño eventuates



Source: BOM, USDA, Bloomberg, Rabobank, 2012

Kazakhstani wheat, removing Black Sea region wheat from the international market.

A strengthening El Niño pattern threatens to erode non-US seaborne grain supplies as the Australian East Coast growing areas often experience drought during El Niño periods. The risk of lower Australian East Coast production this season seems relatively minor as precipitation to date has been sufficient, although a lack of moisture on the West Coast still stands to reduce production from last year's record crop. El Niño would also place pressure on global rice balance sheets with global yields historically correlated to the Southern Oscillation Index as dryness hampers planting (see Figure 2.4). These ongoing production risks are another factor that will likely keep global grain and oilseed prices at elevated levels over the next year due to the need for increased weather risk premiums.

Longer term agricultural commodity prices are expected to be supported by the increased number of extreme weather events which continue to hamper inventory building. Extreme weather reduces the ability of global growers to respond to increased demand, with heat stress during critical summer periods offsetting higher planted acreage and increasing pre-harvest abandonment. Heat stress risks were recently highlighted in a multi-decade study by NASA showing mean summer temperatures and volatility increasing uniformly since the 1960s (see Figure 2.5). Price shocks as a result of low grain and oilseed stocks will likely continue to be exacerbated by adverse weather. Subsequently, we expect commodity prices in futures markets to reflect increased

weather-risk premiums during early phases of the growing season. This will be especially evident during the first half of the calendar year when Northern Hemisphere summer row crops are being planted.

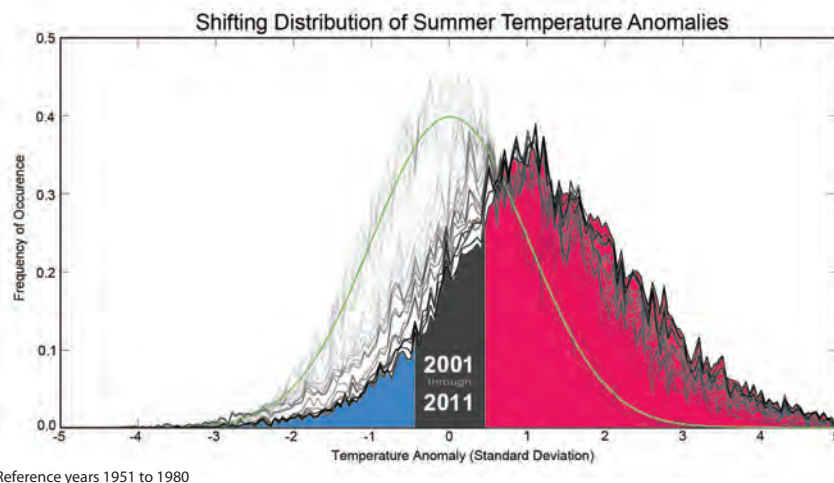
Speculative influence has diminished

The recent rally in global grain and oilseed prices has been predominantly driven by fundamentals. The speculative positions in corn, the most heavily traded agricultural futures market have been lower than the previous price rally in 2010/11. A possible reason for this is the uncertain macro environment this time around, due to economic troubles in the EU and slowing US growth, which has created a more cautionary environment. However, there has been a significant inflow of investor money as the severity of the US drought became clear.

Managed money has doubled its net long position in the agricultural complex, growing from 430,160 contracts to 811,152 contracts since mid-June, but down from 2010 peaks (see Figures 2.6 and 2.7). Over half of the increase has come from position building CBOT Corn contracts with managed money net long positions rising from 260,154 contracts to 323,629 contracts over the period. This inflow of long positions may have helped sustain the upward momentum of prices. However, the direction and for the most part, the magnitude of the price move needed have been the result of fundamentally driven events this season.

Evidence from recent rallies demonstrates differing outcomes with speculators withdrawing 92 percent of their net long positions following the 2007/08 peak, and

Figure 2.5: Changing temperature anomalies, as observed by NASA, show volatility has been increasing; the flattening of this distribution shows that a wider range of extreme temperatures is now occurring compared to past decades



Source: NASA/Goddard Space Flight Center GISS and Scientific Visualization Studio, Rabobank, 2012

prices falling 47 percent over the same period. However, the next largest drawdown in net long positions, -73 percent in 2011, saw prices fall 26 percent, suggesting that fundamentals following this period required still higher prices than speculators were willing to bet on. If fundamental data continues to deteriorate, and demand for agricultural commodities proves as entrenched as we forecast, speculative net longs in the agricultural complex should continue to rise, surpassing record levels set in September 2010. Further supporting the fundamental, rather than speculative, backing of the 2012 rally is that much of the gain in prices pre-dated the speculative increases. This is in sharp contrast to 2008.

Demand rationing to hit biofuels and animal protein industries

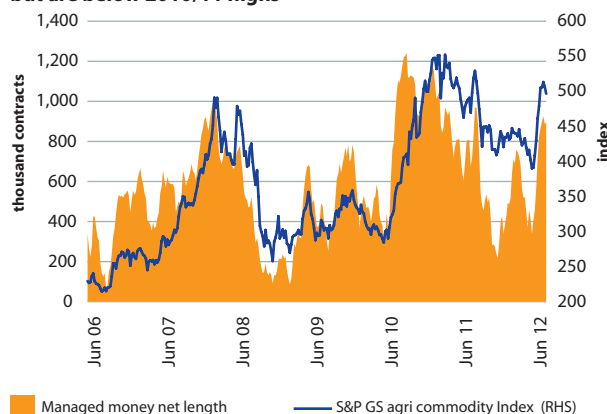
Demand rationing for grains and oilseeds use is expected to be strongest in the US ethanol industry, where corn use is expected to fall 11 percent YOY in the 2012/13 season. Although US ethanol and short-term animal protein production are both relatively inelastic, the scale of the US drought will require significant demand destruction across both industries, in order to contain shortages in feed grains. Importantly, we see declines in ethanol use happening within the bounds of the ethanol mandate, dictated by the needs of gasoline refineries, with further declines possible (but not likely) whether or not the mandate is waived in the near term. Global corn and soy meal use for animal feed is forecast to decline over 6 percent from initial 2012/13 USDA estimates in May, although it is still set to rise 1 percent from 2011/12 levels. Rabobank expects that demand rationing will initially be most

evident in reduced ethanol production in the US and then, as hedge coverage declines into Q1 2013, in the North American animal protein sector. Ethanol production will remain a feature in the US, although it will decrease for the first time in 17 years in 2012/13. There are indicators that this decrease may begin soon, with current ethanol production margins near the worst in the industry's history.

World feed consumption demand is nearly impervious to price shocks in the short term, with global demand rising in 36 out of the last 47 years and only declining 5 percent YOY on two occasions in the 1974/75 and 1988/89 marketing years (see Figures 2.8 and 2.9). This remains the most difficult portion of the balance sheet to forecast as strategic geopolitical decisions, including stockpiling, tariffs and export bans, will determine how much strain is placed on major grain and oilseed exporting nations—the largest of which is still the US. Rabobank expects combined global soybean and corn trade of 191 million tonnes in 2012/13, up 4 percent YOY, spurred by Chinese soybean demand. This will place further pressure on the US internal stock situation and, ultimately, prices for consumers. This will especially be the case if government stockpiling increases and low demand elasticity means larger price increases are needed in the US as a result.

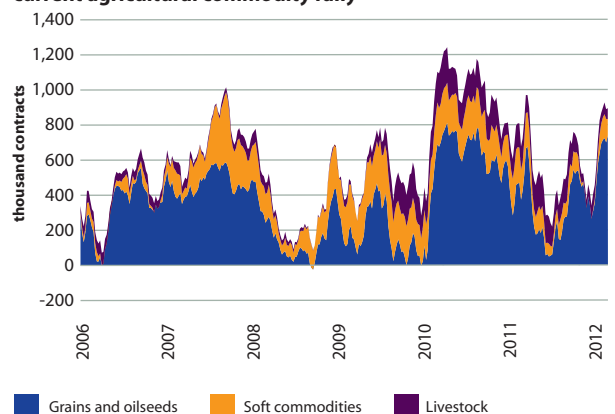
Diminished US soybean production and subsequent evidence of inelastic Chinese demand suggest higher prices are needed to ration demand in 2013. Prices for soy meal and soy oil have also risen, maintaining crush margins, and driving import demand for China. Soy meal is seen as the limiting factor in the oilseeds complex, demonstrated by its 69 percent outperformance of soy oil YTD.

Figure 2.6: Net long positions by managed money in the agricultural complex have increased to levels seen in 2007/08 but are below 2010/11 highs



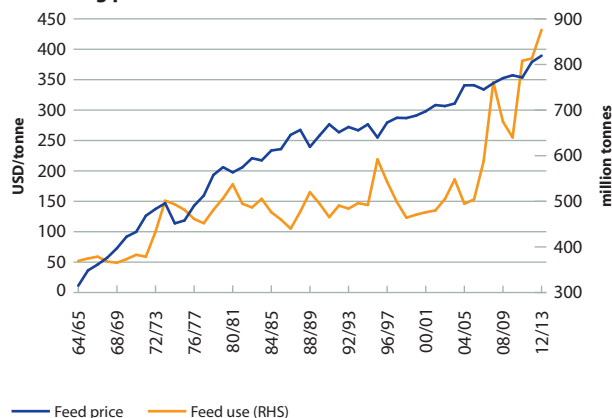
Source: CFTC, Liffe, Rabobank, 2012

Figure 2.7: Speculative net longs have been relatively more concentrated in the grain and oilseed complex during the current agricultural commodity rally



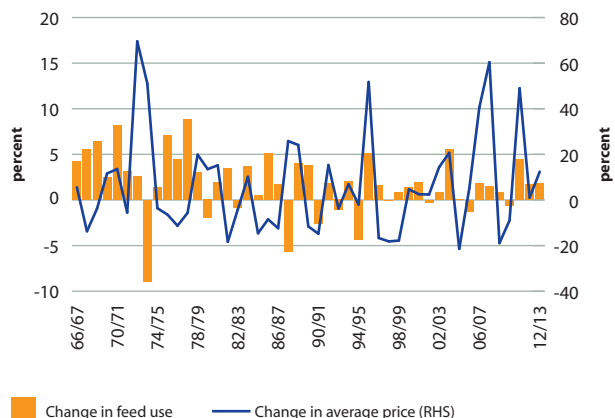
Source: CFTC, Liffe, Rabobank, 2012

Figure 2.8: Global feed use in the grains and oilseeds complex has increased in 36 out of the past 47 marketing years despite escalating prices



Source: USDA, Bloomberg, Rabobank, 2012

Figure 2.9: History suggests that significant, and recurrent, price increases are required to significantly ration global feed demand



Source: USDA, Bloomberg, Rabobank, 2012

We expect that higher prices for downstream soy products (at the consumer level) are inevitable in open markets, with adjustments to US production likely to see the US domestic crush fall 175 million bushels YOY to 1,530 million bushels in 2012/13. China's soybean imports continue to grow, reaching 5.87 million tonnes in July 2012, up 10 percent from July 2011 before declining 2 percent YOY in August to 4.42 million tonnes. We expect that near record-high prices need to be sustained as supplies in Brazil, Argentina and the US dwindle into early 2013.

We believe that US refinery demand for ethanol, the only feasible oxygenate for gasoline in the short term, could push ethanol prices above current gasoline prices. Ethanol margins averaged negative USD 0.06 per gallon over the month during August, with production falling to 820,000 bushels per day, which, if held constant during the 2012/13 marketing year, would imply corn ethanol use of 4,500 million bushels—in line with Rabobank forecasts. The potential reductions in corn demand for ethanol, initially the most elastic form of demand due to excess oxygenation of gasoline in the last two years, will see production fall 500 million bushels short of the 5 billion bushels implied by the RFS mandate. In the short term, a 20 percent fall in ethanol production would require an extra 200,000 barrels per day of oil imports, increasing pressure on retail gasoline prices. Longer term, should negative blending economics at the refinery level be sustained, the relatively abundant supply of natural gas-derived oxygenate substitutes could be supported and would pose a threat to the sustainability of the conventional biofuels industry in the US. However, this

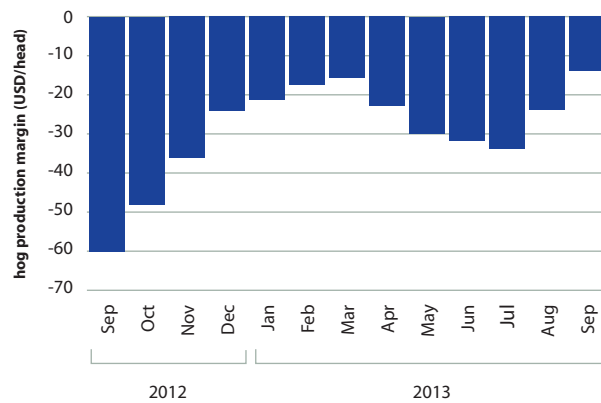
would only be feasible if the RFS mandate were repealed, something that we are not expecting at this point.

As corn production losses cannot be completely taken out of US ethanol demand, we expect US livestock corn feed to be reduced by 400 million bushels YOY to 4,150 million bushels in 2012/13. The US government introduced a USD 383 million drought relief package, mainly for the livestock industry, which amounts to less than 46 million bushels of corn at current prices. While demonstrating the scope of support behind the livestock industry, this is equal to only 1 percent of the industry's corn use in the 2011/12 marketing year. This will have little-to-no effect on the scale of demand rationing undertaken in 2012/13. Although, as will be discussed on page 19, many livestock producers have hedges currently in place, the strength of market pressures is extraordinary, with US livestock herds likely to be liquidated at an accelerating pace in 1H 2013. Near record-low hog margins of negative USD 60 per head should begin to reduce production in the US pork industry, with other countries following in lock-step as lower margins shift the supply of animal protein to a lower base (see Figure 2.10).

Second order impacts—the knock-on effects

Rabobank believes that the new records being set in grain and oilseed prices will have long-tailed effects on a number of F&A supply chains. Short term, we will see significant pressure on quickly processed parts of the global grains and oilseeds complex, such as milling, brewing and ethanol. Longer term, and most importantly, sustained higher prices and lags in animal protein herd adjustments

Figure 2.10: Current hog production margins implied by CBOT futures are strongly negative



Source: Bloomberg, CME, Rabobank, 2012

will push meat and dairy prices up, taking the effects of the 2012 drought into the 2013 and 2014 seasons.

Grains and oilseeds

Grain and oilseed processors face both increased risk and opportunity with structurally higher and more volatile crop prices. As crop shortfalls in some seasons reduce origination and processing capabilities as well as utilisation (such as in the US and the Black Sea region this year), regional shortfalls will also create opportunities where crops have been adequate, such as Brazil.

Overall, risks have been more prevalent in recent results by public companies. For instance, Wilmar recently posted a sharp decline in their oilseed and grain segment due to continued overcapacity in Chinese soybean processing. In contrast, both ADM and Bunge have spoken of good crushing profitability in Brazil. In times of tight supplies, operators in grain and oilseed surplus regions typically do better than importers.

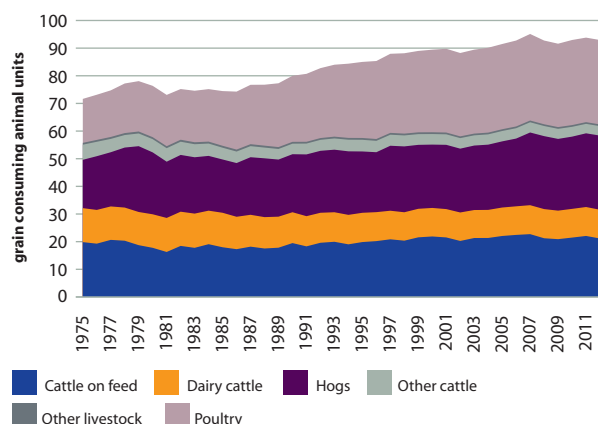
Extreme volatility can also play havoc with grain companies' abilities to match origination with destination while maintaining hedged positions. The Merchandising and Handling segment at ADM saw profits slump from USD 182 million to USD 30 million in the most recent quarter, and Cargill posted an 82 percent decline in overall profitability while calling out poor trading positions. Risk management becomes difficult in rapidly changing markets. Bunge is the rare company posting improvement in its agribusiness segment, benefitting from its portfolio exposure to South America and favourable market positioning.

Higher crop prices have a direct impact of increasing working capital needs. Most grain and oilseed companies reacted to the run-up in crop prices in 2008 by deleveraging balance sheets and increasing liquidity and therefore are in a much better position to weather the current environment. These increased needs for working capital will also likely cause a pause in global industry consolidation as companies preserve capital. However, once volatility abates we believe the battle for origination will continue and cross-border mergers and acquisitions will accelerate.

Animal protein

Global animal protein producers are facing immediate and significant feed cost increases, which are expected to impact supply dynamics for the coming seasons and lead to increased meat prices. The animal protein sector has become more sophisticated with locking in input costs, and we believe regimented hedging policies will result in resilient feed demand in the short term. As we anticipate elevated prices to remain for the next couple of seasons, livestock and poultry production will need to decline sufficiently in the medium term, such that prices can rise to offset increased costs. The need to temper meat demand until stocks can be rebuilt will be negative for the animal protein industry. We expect lower margins will shift the supply of animal protein to a lower base, a bullish longer term scenario that could result in diminished herds as economic growth and demand increase. The annual shift in the supply of grains is contrasted by the multi-year herd cycle, which results in the need to rebalance in the coming two seasons. This is forecast to result in a contraction of herds and negative pressure on margins,

Figure 2.11: The US animal herd has stagnated in recent years and is set to face increased pressure in 2012/13 as input prices rise



Source: USDA, Rabobank, 2012

but increasing meat prices as the structural level of meat output falls too low. Further compounding the challenge, corn supplies for North American and other global animal producers are limited due to competition from the ethanol industry, which absorbs approximately 40 percent of US corn production.

Chicken

Due to the relatively short animal life cycle, chicken producers have a greater ability to adjust production due to higher input costs than pork or beef producers. Additionally, following a difficult 2011, many chicken companies, particularly in the US, have not had time to rebuild their balance sheets, increasing the pressure to adjust production quickly. On the positive side, pricing is better than in 2011, and companies across the industry have shortened the length of fixed price contracts, which limits exposure to cost volatility. At current market prices, costs have risen by nearly 10 cents per lb produced since the spring increase in soy meal costs and the more recent spike in corn prices. While it is impossible to be precise with such estimates, we believe supplies will need to be reduced by at least 3 percent to 5 percent to offset higher costs. Chicken producers in Brazil have also been squeezed by tight soy meal supplies and those that produce primarily for the domestic market are suffering, with those focusing on fresh products worst off. Chicken producers in China have struggled with pricing this year due to increased competition from lower pork prices, but with some potential for relief in the six-to-twelve month time frame.

Pork

Pork producers will also face challenges and losses from higher feed input costs. In markets that are less mature and where cost structure varies widely, this will accelerate the departure of less efficient, typically smaller, producers. In Europe, we believe these higher costs will exacerbate herd liquidation that was underway due to soon-to-be implemented animal welfare and environmental regulations. In the US, many producers have been able to hedge forward feed costs against future hog sales and may not face a big increase in costs until early in 2013. We believe that the US herd was headed for expansion in early summer, but that these plans have now been curtailed. On paper, US hog producers look to be facing USD 20 per head losses in 2013, which would take about USD 2 billion in equity out of the industry.

Beef

The cattle cycle is years in length, making quick adjustments to market conditions impossible. World beef production has been fairly stagnant for many years now, and we do not expect the drought in the US to cause that to change (see Figure 2.11). Earlier this year we saw the potential for US beef breeding herd expansion, but with the drought in the US Plains this is no longer possible due to poor pasture conditions. In addition, the high cost of corn will reduce feeder cattle prices in the short-to-medium term, which will further inhibit herd expansion. High corn prices are also likely to curb the ability of countries, such as Indonesia, that are trying to become more self-sufficient in beef production.

Dairy

In the dairy sector, the surge in grain and oilseed prices will damage producer margins, push up dairy ingredient costs and negatively impact processor returns.

At the producer level, higher costs of purchased feed will reduce margins, particularly in the US where reliance on brought-in feed is high. Also in the US, average producer income over feed costs (IOFC) is expected to come in at just USD 3.96 per cwt in July, less than half the indicative breakeven level and as bad as anything seen in 2009 following the global financial crisis. While the futures curve suggested some improvement in IOFC (based on some improvement in local milk prices), it implies that margins will remain negative over the balance of 2012. At this time, the prospects for a better result for producers than suggested by the current futures curve appear slim. Higher grain and oilseed prices will also negatively impact producer returns in other regions, where these commodities comprise an important part of cows' diets (including Argentina, Australia and parts of the EU), though this will have little impact on the pasture based regions, such as New Zealand and Ireland.

Via curtailing milk production, higher grain and oilseed prices will also accelerate the anticipated recovery in global dairy commodity prices. Over the balance of 2012, low or negative producer margins in some key producing regions will encourage a slowdown in milk supply growth as herds are culled and feed rates are reduced. With import demand for dairy holding up reasonably well, this is expected to tighten the global dairy

market as we progress through 2012, with the prospect of a substantial market squeeze in early 2013.

Higher ingredient costs will re-ignite retail price inflation in the dairy case, bringing to an end the temporary relief enjoyed by consumers in 1H 2012. Retail prices had been on the decline in most regions in 1H 2012, as 12 months of declining agricultural commodity costs were passed on to consumers. The anticipated escalation of agricultural commodity costs through late 2012 will reverse this process in many regions. The rate of price increases will likely be short of that seen in previous price spikes due to the relatively high prices still in place at retail today. However, this will still push prices back to very high levels by historic standards.

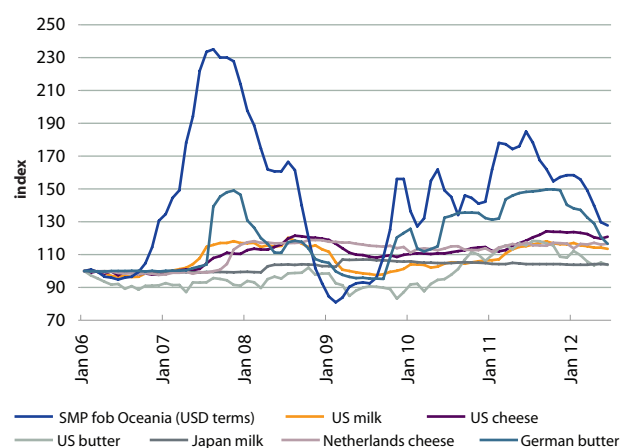
Many processors will struggle to immediately pass on the full extent of rising ingredient costs, with margins negatively impacted as a result. Processors' abilities to pass on costs quickly are constrained by the tenor of existing retail contracts, market power and the price sensitivity of consumers. Over the next six to nine months, many will see short-term margin compression as a result, with those operating in price sensitive regions (e.g. South East Asia), selling highly commoditised products with limited value-add (e.g. white milk), or facing powerful retailers that are particularly exposed.

Beverages

Soft drinks

The impact of higher grain and oilseed prices on the global soft drinks sector has been muted due to the cost and margin structure of the industry. Cost analysts conclude that

Figure 2.12: Retail dairy price indices vs. global skim milk powder price



Source: USDA, Rabobank, 2012

even with the near doubling of corn prices in recent months, a USD 1.50 per litre soft drink, sweetened with high fructose corn syrup, has less than a nickel's worth of corn in it. Coca Cola and PepsiCo took pricing up by 3.5 percent to 5.0 percent in 2011, but have been less aggressive in 2012 based on lower agricultural commodity costs. Global soft drinks companies have seen an easing of packaging and ingredient costs over the past 18 months as PET resin, aluminium, sugar, juices and coffee prices have all moved lower in comparison to 2011.

Beer

Within the beverages category, the negative impact of higher grain and oilseed prices has been the greatest on brewers, especially in drought-stricken regions such as Ukraine and Russia. Prices for malting barley, an essential ingredient in the brewing process, have jumped as farmers shifted away from planting barley to corn, which has been bringing higher prices. Larger global brewers are able to secure longer term contracts and use hedging to protect themselves against recent price increases. Beer makers have seen malt barley price increases ranging from 40 percent to 80 percent, and hops suppliers announced increases ranging from 20 percent to 100 percent, depending on the variety of hops. Over the past decade, hops price increases have been driven by a global shortage and poor output in Europe. The global acreage dedicated for hops growing has fallen by half in the past 12 years and craft brewers are finding scarcity of hops supply to be their greatest concern.

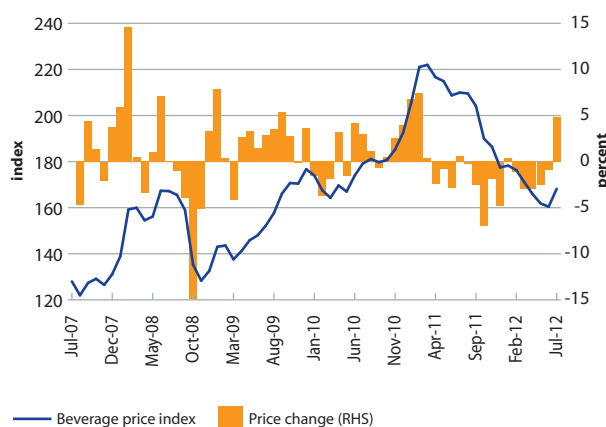
Value-added processing

The impact of the rising agricultural commodity prices in the value-added processing sector varies depending on a number of factors, including the percentage share of commodities within cost of goods sold, hedging strategies and the specifics of supply agreements with customers, to name a few. These factors will decide the extent of the impact of recent price increases on food processors, their margins and profits.

In the absence of advertising and promotional spending, the relative impact of rising commodity prices on the profit and loss accounts of private label and B-brand players across the various VAP subsectors will be higher than for A-brands. With agricultural commodity input costs accounting for roughly 35 percent of a private label player's revenues on average, and an average operating margin of 5 percent, it is clear that the current spike in prices will seriously hurt the less differentiated processors. Even A-brands are likely to experience initial difficulty passing on higher prices to customers, depending on the duration of their supply agreements, as they are likely to have been caught off guard by the recent price moves as well. Especially during these times of economic headwind, retailers and their customers will be very reluctant to accept price increases.

Food processors have several options to respond to rising input costs in the near to medium term, including trying to pass on input price increases to customers, internal cost savings, smaller package sizes and portions while keeping prices unchanged, ingredient substitution, and further pruning

Figure 2.13: Beverage prices increased in July but remain considerably below the highs reached in early 2011



Source: IMF, Rabobank, 2012

of the product portfolio. However, some of those measures, such as internal cost savings, have already been taken during the previous periods of rising commodity prices and may not provide enough relief. Still, we do expect some of the smart processors to implement the lessons learned from the two previous periods of strongly rising commodity prices. However, passing on cost increases in currently weak developed markets will be very difficult, with consumers' budgets already stretched. In the end though, we expect the value-added processing sector will start to feel the pinch of rising commodity prices with a time lag of three to six months.

On 8 August, Rank Hovis in the UK announced an intended price increase of GBP 77.35 per tonne for all flours beginning 26 August. Two weeks earlier, ADM had announced a flour price increase of GBP 75 per tonne beginning 30 July. Prolonged price increases will likely start to impact the well covered/hedged bakery players from late 2012 onwards. In our view, companies without adequate hedges in place will start to feel the pain by the end of Q3.

Farm inputs

Farm input companies benefit from the elevated purchasing power of farmers due to higher agricultural commodity prices. Fertiliser prices, tractor sales and sales of seeds and crop protection chemicals are all strongly correlated to prices of agricultural commodities. Farmers seek to increase crop production to benefit from the higher crop prices and have the cash to increase spending on more and better inputs to increase yields.

Increased volatility requires stringent measures for inventory control and production flexibility. As a result of the volatility in agricultural commodity markets, farm inputs markets have changed from a stable buyers' market, where production costs determine market prices, to a volatile market that alternates between a buyers' market and a sellers' market. The first time this change was observed was during the 2007/08 commodity boom. Many inputs suppliers learned an expensive lesson after the collapse of prices in 2008, which led to a sudden decline in demand for farm inputs resulting in a mass financial write-down on fertiliser inventories. The implementation of stringent measures for inventory control, especially in fertiliser, has become a necessity. In the last two years, upstream players have worked to reduce inventories and keep them at low levels. Furthermore, farm inputs companies should be careful when it comes to extrapolating

today's sales growth into the longer term future as a return to a buyers' market can be expected when agricultural commodity prices come down again, resulting in a decline in sales.

Food & Agribusiness Research and Advisory (FAR)

Agri Commodity Markets Research (ACMR)

Luke Chandler,
Global Head
+44 20 7664 9514
luke.chandler@rabobank.com

Keith Flury,
Senior Commodity Analyst
+44 20 7664 9676
keith.flury@rabobank.com

Erin FitzPatrick,
Commodity Analyst
+44 20 7664 9540
erin.fitzpatrick@rabobank.com

Nick Higgins,
Commodity Analyst
+44 20 7664 9543
nicholas.higgins@rabobank.com

Contributing FAR Strategists

David C. Nelson,
Global Strategist
Grains & Oilseeds; Animal Protein
+1 312 408 8210
david.nelson@rabobank.com

Cyrille Filott,
Head of FAR Europe
+31 30 71 23814
cyrille.filott@rabobank.com

Tim Hunt,
Global Strategist, Dairy
+1 212 916 7833
tim.hunt@rabobank.com

Ross Colbert,
Global Strategist, Beverages
+1 212 916 7960
ross.colbert@rabobank.com

Dirk Jan Kennes,
Global Strategist Farm Inputs
+31 30 71 23818
dirk.jan.kennis@rabobank.com

Global Financial Markets

Financial Markets Research

Jan Lambregts,
Head of Financial Markets Research
+44 20 7664 9669
jan.lambregts@rabobank.com

Elwin de Groot,
Macro Strategist
+31 30 216 9012
elwin.de.groot@rabobank.com

Adrian Foster,
Head of Financial Markets Research, Asia Pacific
+852 2103 2612
adrian.foster@rabobank.com

Corporate sales contacts:

ASIA—Brandon Ma
+852 2103 2688
brandon.ma@rabobank.com

AUSTRALIA—Terry Allom
+61 2 8115 3103
terry.allom@rabobank.com

EUROPE—Arjan Veerhoek
+31 30 216 9040
arjan.veerhoek@rabobank.com

EUROPE—David Kane
+44 20 7664 9744
david.kane@rabobank.com

BRAZIL—Sergio Nakashima
+55 11 5503 7150
sergio.nakashima@rabobank.com

US & CANADA—Sarah Lee
+1 212 916 7875
sara.lee@rabobank.com

US & CANADA—Neil Williamson
+1 212 808 6966
neil.williamson@rabobank.com

MEXICO—Marco Garcia
+52 55 52610029
marco.garcia@rabobank.com

CHILE—Gaston Iroume
+56 2 4498536
gaston.iroume@rabobank.com

