LMC International

Sugar and Sweeteners Quarterly

Third Quarter 2012

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Report:

Third Quarter 2012

August 2012

Research and analysis to inform your business decisions

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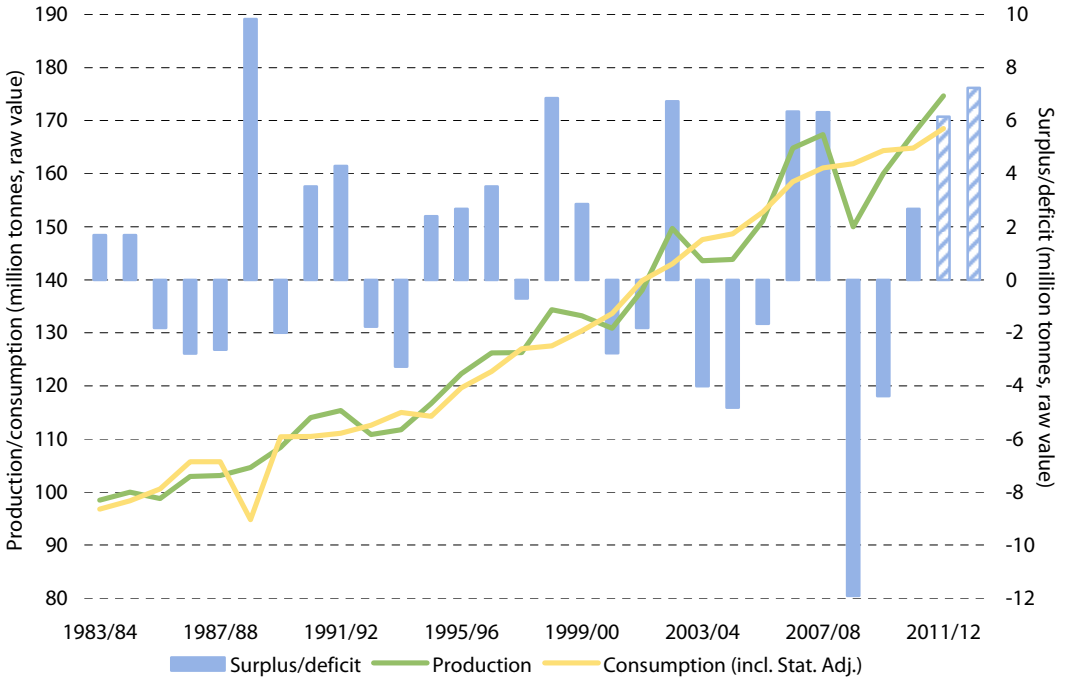
- The raw sugar market has endured mixed fortunes over the last quarter. The nearby ICE No.11 raw sugar futures price followed a largely downward trend from the end of March through to the start of June, briefly breaking below 19 cents/lb for the first time since August 2010. However, during the remainder of June and most of July, prices found renewed support on the back of weather concerns in Centre/South Brazil and India. Since then, however, they have reverted back down, as the weather risks have eased and the Centre/South Brazilian harvest has finally entered full flow. At the same time, the nearby raw sugar spread has weakened over the course of the past month, which is starting to reflect the cost of carry and providing evidence that the long-anticipated global production surplus has finally begun to arrive on the market.

- Since the last *Sugar Quarterly*, our estimates for global production surpluses in the 2011/12 and 2012/13 seasons have tightened, although we still anticipate sizable overall surpluses in both crop years.

- Overall, the global surplus in 2011/12 is now estimated 6.1 million tonnes. For 2012/13, output is projected to increase further by 2.3% to 178.6 million tonnes, with global consumption rising by 1.7% to 169.1 million tonnes. Again assuming an allowance for unrecorded trade, we are currently forecasting a global surplus of 7.2 million tonnes in 2012/13 (Diagram E1).

Diagram E1: World sugar balance



- Looking ahead, the performance of the harvest in the Centre/South will continue to be the most important fundamental factor influencing world prices in the months ahead, followed closely by prospects for the 2012/13 crop in India, which has been impacted by weak monsoon rains over the last few months.

Table E1: World sugar balance — October/September crop years[1], 2008/09-2012/13

	World Consumption	World Production	Apparent Surplus/ Deficit	Statistical[2] Adjustment	Actual Surplus/ Deficit	Actual Stock Total	LMC[3] Stock Index
2008/09	160,475	149,969	(10,506)	(1,414)	(11,919)	49,061	1.26
2009/10	163,085	159,995	(3,090)	(1,292)	(4,382)	44,679	1.14
2010/11	162,675	167,548	4,873	(2,193)	2,669	47,347	1.20
2011/12	166,268	174,656	8,388	(2,242)	6,147	53,494	1.33
2012/13	169,112	178,633	9,521	(2,280)	7,240	60,734	1.48

Notes:
1. Individual country crop years are adjusted to reflect the international sugar season running October/September.
2. A statistical adjustment is included to account for unrecorded net exports.
3. Year-end index of the stock total divided by world consumption (1980 = 1.00).

Points to watch

- In Centre/South Brazil, the increased rains that the region received between April and June have been beneficial for agricultural yields meaning that we have increased our estimate of total cane output (to 493 million tonnes, compared to 470 million tonnes previously). However, the challenge facing Brazilian millers will be to crush all of the cane this year. Diagram E2 reveals the average daily crushing rate that will be required for mills to process all of its cane by mid-December, after which the onset of summer rains means that cane quality deteriorates to the point where most mills must cease operations. It shows that actual crushing rates have varied considerably from year to year and depend heavily on the weather. However, if the industry is to crush 490 million tonnes, it must match the crush rate that was achieved in 2009/10, well above the level achieved in the last two years.

- While additional cane should boost production, the flipside of this is that it has also proved detrimental for sucrose formation and ATR yields, which are now lower than last year and well below historical levels (Diagram E3). As a result we have reduced our estimate of ATR yields with the result that sugar production is now estimated at around 30 million tonnes, *tel quel*, around 1.5 million tonnes lower than our previous estimate, and below what most players in the market are expecting.

Diagram E2: Cane crushing rates in C/S Brazil

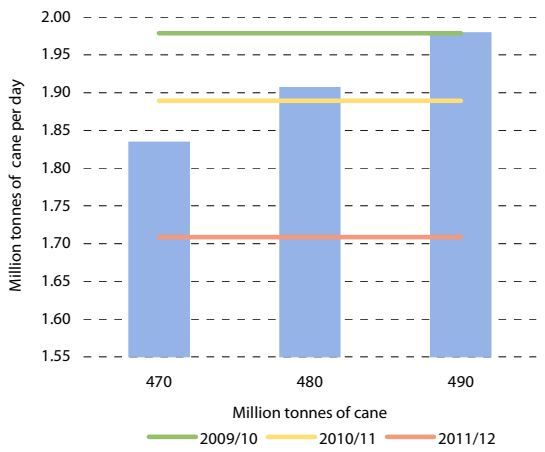
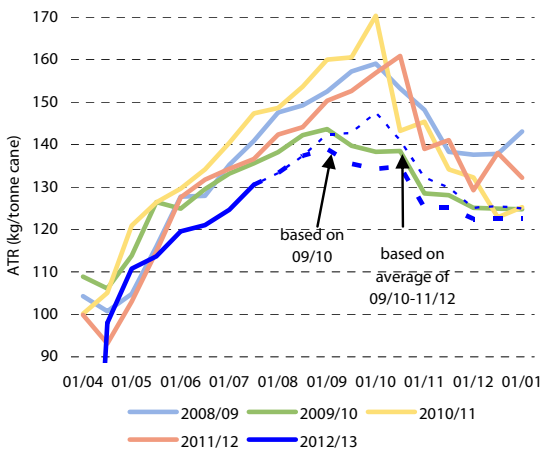
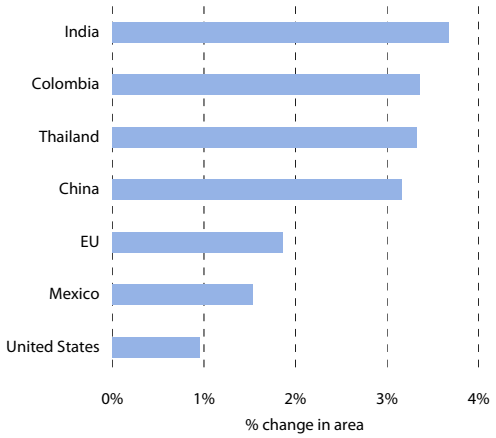


Diagram E3: ATR yields in C/S Brazil



- In the northern hemisphere, figures for area planted under cane are now becoming clearer, with the result that we have revised a number of 2012/13 sugar production forecasts. Diagram E4, which reveals the projected increases in area planted to cane/beet for a selection of producers located in the northern hemisphere, shows that area has increased in many locations.

Diagram E4: % change in area under sugar crops for selected countries, 2012/13 vs. 2011/12



- Whether the increases in area that have been reported for these industries translates into higher sugar production will depend heavily on the weather conditions over the coming months, which is very difficult to predict! If the moderate El Niño weather phenomenon, which has been forecast, proves detrimental to these crops then the global production surplus for 2012/13 will inevitably fall short of our projections.

- Nevertheless, even taking into account a smaller Brazilian crop, our latest analysis of the future raw sugar trade flows still show some sizeable surpluses for the coming quarters, which should continue to exert pressure on prices going forward (Diagram E5).

- Based on this, we therefore believe that prices should continue to fall to the level of ethanol parity in Brazil. Based on an exchange rate of R$2.0/US$, our ethanol price forecast for 2012 Q4 translates into a sugar price of around 18-19 cents/lb. On this basis, raw sugar prices should approach this level over the course of the remainder of this year. After that, in Q1 next year, assuming that the crops in Brazil and India perform as expected, the concept of ethanol parity becomes less important as Brazilian millers are no longer producing, creating the risk that prices could even fall below this level.

- However, these price forecasts are based on our current supply/demand projections, where we have taken the view that a moderate El Niño weather pattern should not have a significant negative impact on production in most countries. If the El Niño influence proves to be stronger than anticipated and affects a number of sugar crops in Asia and Central America, prices are likely to return to a band in excess of 20 cents/lb, reflecting the fact that a strong signal will need to be sent to Brazil to produce as much sugar as possible.

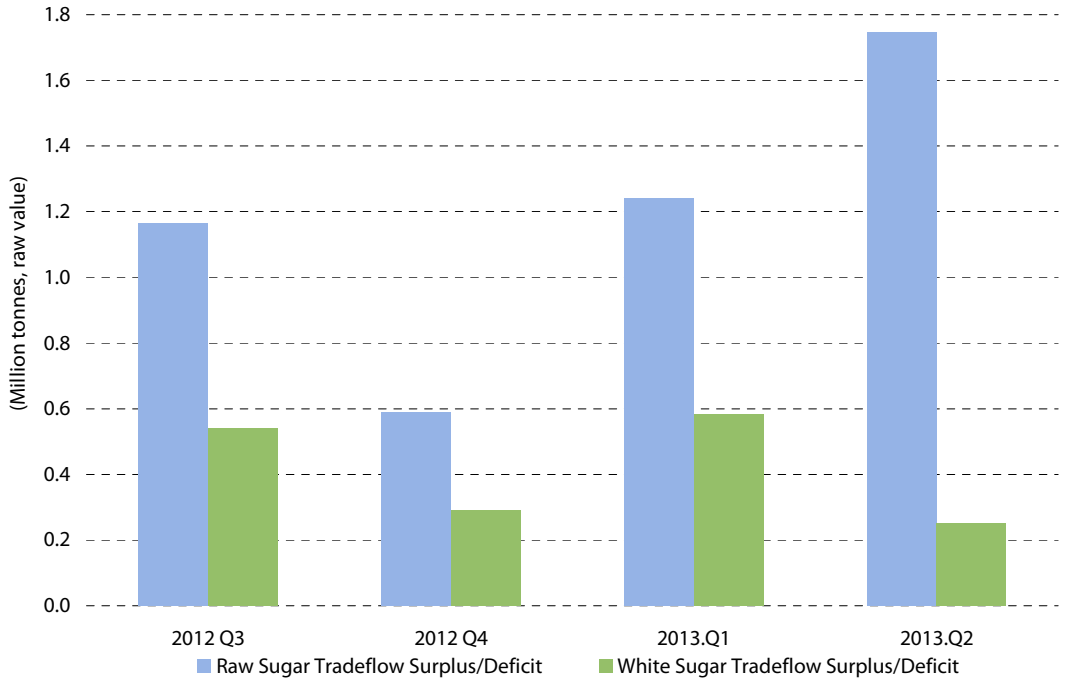
- In the white sugar market, the nearby white premium has generally increased over the course of the year-to-date, although on a *tel quel* basis it has fallen back slightly to a level of around US$110-120 per tonne over the course of the past month.

- At this time of the year, with the Indian, EU and Thai white sugar export campaigns beginning to wind down, focus for the white premium tends to switch to the destination refineries that focus on the re-export business, such as Dubai. While the prospect of refined sugar trade flow surpluses over the next three quarters should dampen any potential gains in the white premium during this period, the *tel quel*

premium will still have to remain at a level to encourage these refineries to export sugar, i.e. to cover their operating costs, especially in the near term given the lower supply from traditional refined sugar exporters.

- Given current global oil prices of around US$100 per barrel and a global raw sugar price of 19 cents/lb, we currently estimate this cost to be around US$110-120 per tonne for destination refineries such as Dubai. With EU exports a known quantity, we expect the white premium to remain supported over the next few months, although going into 2013, much will depend on whether India allows further exports to take place, which would boost the availability of low quality sugars.

Diagram E5: Raw/white sugar quarterly trade balances



Sugar by-products and ethanol

- The large molasses crops in several key molasses producing and exporting Asian countries, most notably India and Thailand, have continued to weigh heavily on molasses prices in a number of key import markets.

- In the ethanol market, there has been a major reversal in the direction of ethanol prices in the US. During the first half of 2012, ethanol prices had averaged 10-20% lower than their average in 2011. However, since the start of June, ethanol prices have shot up around 30% averaging US$0.68/litre so far in the third quarter, similar to the average in 2011. The major factor behind the price rice has been severe drought, which has devastated the corn crop, resulting in a spike in corn prices.

Points to watch

- Molasses prices in the US have remained fairly subdued despite sharply rising corn prices. Given that molasses and corn are substitutes in the animal feed sector, rising corn prices should, in theory, provide some support for molasses values. However, the US molasses sector is currently facing the prospect of large quantities of beet molasses

hitting the market later in the year when the 2012/13 beet harvest starts. However, if corn prices remain high, there is the potential for molasses prices to rise later in the year.

- Escalating ethanol prices in the US and EU mean that the attractiveness of supplying the export market has improved, which could serve to tighten further Brazil's domestic ethanol market. For example, in the EU, ethanol imports from Brazil are now cheaper than from the US, principally because of the extremely high prices now being seen in the US.

Corn sweeteners

- High corn prices will lead to higher costs for HFCS. For 2012/13, a corn price of $8.20 per bushel would imply an HFCS-55 production cost in the US of around 25 cents per pound, dry value when processing cost and by-product credits are taken into account.

Points to watch

- The prospect of lower Mexican sugar prices in 2012/13 mean that US wet millers will face a challenge to ensure they can still offer the discount to sugar that is demanded by Mexican end-users while also turning a profit.

Low calorie sweeteners

- The stevia market has seen significant activity in the last six months. *Datamonitor* estimates that, in the first half of 2012, the number of launches of stevia-containing products was over 200, much higher than during the whole of 2011.

Points to watch

- In the EU, a large number of tabletop products containing the high purity stevia extract, Reb-A, (very often in combination with sugar) have been launched since December 2011. In addition, the confectionery and dairy markets have also witnessed significant developments. Key players in the dairy sector such as Danone and Arla have introduced into the markets yogurts and milk-based drinks sweetened with Reb-A. It is likely that more products will follow in the coming months and their success will be a key point to watch over the coming months.

Sugar freight

- After some recovery in the second quarter, freight rates have been trending downwards since the beginning of the third quarter of the year and fell sharply in August for many routes originating in the western hemisphere.

Points to watch

- In particular, rates have fallen sharply fro vessels originating in Brazil, with too many vessels chasing too few sugar cargoes. The problem arose when the slower-than-expected pace of the Brazilian harvest resulted in a build up of vessels in the region. As a result, rates to the Middle East fell to just US$35 per tonne in August.

Table E2: World sugar prices and forecasts, 2005-2013 (US cents/lb, unless indicated)

Year, Quarter	New York No.11 Raw Sugar [1]	LDP Raw Sugar [2]	LIFFE No.5 White Sugar [1]	LDP White Sugar	White Premium (tel quel) [3]	White Premium (pol adjusted) [4]	LMC Stock Index
2005.Q1	8.91	8.86	11.89	11.92	2.98	2.20	1.37
2005.Q2	8.62	8.69	11.41	12.05	2.78	2.03	1.38
2005.Q3	9.97	9.92	13.42	14.72	3.45	2.58	1.38
2005.Q4	12.46	11.90	13.98	14.08	1.52	0.43	1.36
Average 2005	**9.99**	**9.84**	**12.67**	**13.19**	**2.68**	**1.81**	**1.36**
2006.Q1	17.06	16.93	19.37	19.22	2.32	0.84	1.19
2006.Q2	16.43	16.46	21.12	21.37	4.70	3.27	1.22
2006.Q3	13.40	-	18.96	-	5.57	4.40	1.33
2006.Q4	11.64	-	17.09	-	5.45	4.44	1.35
Average 2006	**14.63**	**16.69**	**19.14**	**20.29**	**4.51**	**3.24**	**1.35**
2007.Q1	10.65	-	15.28	-	4.63	3.71	1.38
2007.Q2	9.18	-	14.63	-	5.45	4.65	1.42
2007.Q3	9.68	-	13.24	-	3.56	2.72	1.44
2007.Q4	10.10	-	13.01	-	2.90	2.02	1.48
Average 2007	**9.90**	**-**	**14.04**	**-**	**4.14**	**3.28**	**1.48**
2008.Q1	12.54	-	15.77	-	3.23	2.14	1.53
2008.Q2	11.21	-	15.77	-	4.56	3.58	1.56
2008.Q3	13.06	-	17.47	-	4.40	3.27	1.56
2008.Q4	11.61	-	14.74	-	3.13	2.12	1.49
Average 2008	**12.10**	**-**	**15.93**	**-**	**3.83**	**2.78**	**1.49**
2009.Q1	12.73	-	17.08	-	4.34	3.24	1.32
2009.Q2	14.71	-	19.50	-	4.79	3.51	1.28
2009.Q3	20.55	-	23.70	-	3.15	1.36	1.26
2009.Q4	23.64	-	27.73	-	4.09	2.03	1.18
Average 2009	**17.91**	**-**	**22.00**	**-**	**4.09**	**2.53**	**1.18**
2010.Q1	24.39	-	29.86	-	5.47	3.35	1.03
2010.Q2	15.53	-	22.32	-	6.79	5.44	1.11
2010.Q3	20.17	-	26.38	-	6.21	4.45	1.14
2010.Q4	29.01	-	33.03	-	4.03	1.50	1.02
Average 2010	**22.27**	**-**	**27.90**	**-**	**5.62**	**3.69**	**1.02**
2011.Q1	30.50	-	34.07	-	3.56	0.91	0.95
2011.Q2	24.46	-	30.47	-	6.02	3.89	1.08
2011.Q3	28.68	-	34.19	-	5.52	3.02	1.20
2011.Q4	24.74	-	29.36	-	4.62	2.46	1.17
Average 2011	**27.10**	**-**	**32.02**	**-**	**4.93**	**2.57**	**1.17**
2012.Q1	24.56	-	29.05	-	4.49	2.35	1.25
2012.Q2	21.18	-	26.47	-	5.29	3.45	1.22
2012.Q3	*20.70*	*-*	*26.30*	*-*	*5.60*	*3.80*	*1.33*
2012.Q4	*18.50*	*-*	*23.94*	*-*	*5.44*	*3.83*	*1.30*
Average 2012	***21.24***	***-***	***26.44***	***-***	***5.20***	***3.36***	***1.30***
2013.Q1	*18.00*	*-*	*22.99*	*-*	*4.99*	*3.42*	*1.33*
2013.Q2	*17.60*	*-*	*22.36*	*-*	*4.76*	*3.23*	*1.38*

Notes:
1. First position futures prices.
2. London Daily Price adjusted to f.o.b. Caribbean Port, in bulk, using the CARUK freight rate.
3. Premium calculated as the difference between the LCE No.5 white sugar first position futures price and the New York No.11 raw sugar first position futures price.
4. Incorporates pol adjustment and expressed per pound of white sugar.
5. Refers to end of the period stocks.

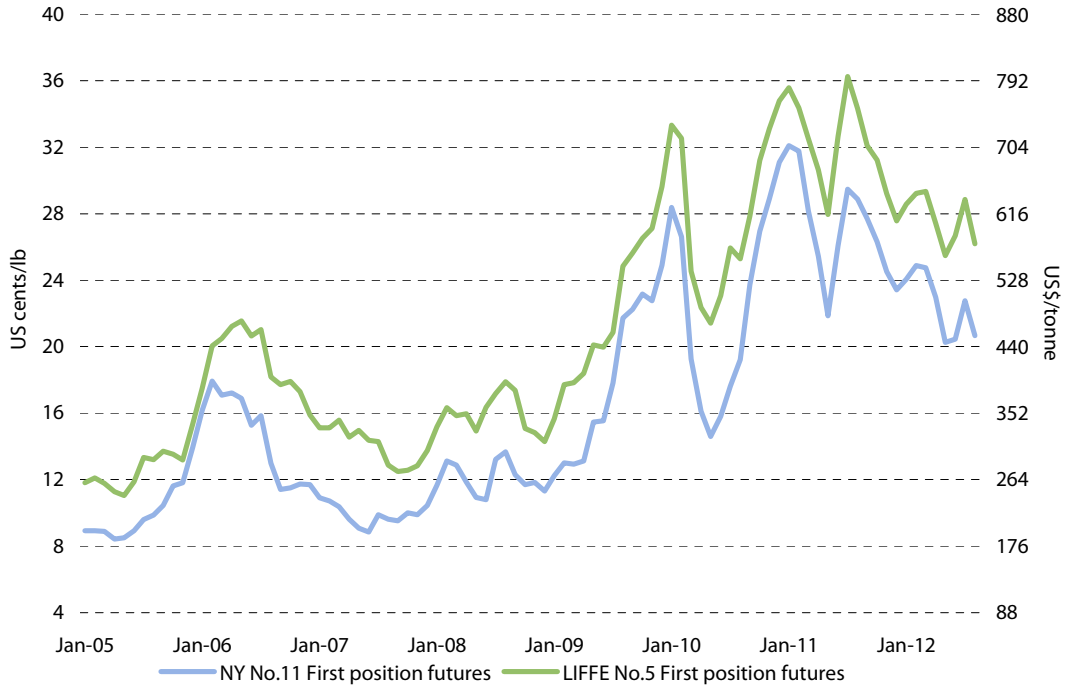
Chapter 1: Sugar Market Fundamentals and Price Outlook

Price developments

The raw sugar market has endured mixed fortunes over the last quarter. The nearby ICE No.11 raw sugar futures price followed a largely downward trend from the end of March through to the start of June, briefly breaking below 19 cents/lb for the first time since August 2010. However, during the remainder of June and most of July, prices found renewed support on the back of weather concerns in Centre/South Brazil and India. Since then, however, they have reverted back down, as the weather risks have eased and the Centre/South Brazilian harvest has finally entered full flow (Diagram 1.1). At the same time, the nearby raw sugar spread has weakened over the course of the past month from around zero to 70-80 points, which is starting to reflect the cost of carry and providing evidence that the long-anticipated global production surplus has finally begun to arrive on the market (Diagram 1.2).

Looking ahead, the performance of the harvest in the Centre/South will continue to be the most important fundamental factor influencing world prices in the months ahead, followed closely by prospects for the 2012/13 crop in India, which has been impacted by weak monsoon rains over the last few months.

Diagram 1.1: Raw and white sugar futures prices



As we discussed in the previous *Sugar Quarterly*, given the considerable global production surpluses we are forecasting for both the 2011/12 and 2012/13 seasons (see Fundamentals section below), we believe that global prices will continue to fall during the final quarter of the year, heading towards ethanol parity in Brazil. This parity level is currently estimated at around 16-17 cents/lb but we expect this to rise as domestic ethanol prices in Brazil increase during the second half of their crop. However, from the first quarter of next year, when Centre/South Brazil will be in its off-crop, there is a risk that sugar prices could fall below ethanol parity as it will not affect the composition of Brazil's output.

However, from a fundamental perspective, there are still major risks which could provide potential support for prices during this period. Key among these is the harvest in Centre/South Brazil. As Diagram 1.3 reveals, the start of their harvest this year was disrupted by above average rains in April, May and, in particular, June. As a result, cane crushing and

sugar production remain considerably behind the levels achieved at the same stage as last year, and there is increasing concern that millers will not be able to crush all of the available cane. While weather during July and August has been largely dry, which has allowed production to catch up compared to last year, any further disruptions, combined with the poor quality of the cane being crushed, could lead to final sugar output being lower than expected. In particular, this could happen if the current threat of a moderate El Niño materialises over the latter half of the year, which traditionally has bought increased rainfall to the region. We discuss the potential for the remainder of the Brazilian harvest in greater detail in the raw sugar price outlook section below.

Diagram 1.2: New York No.11 raw sugar market structure

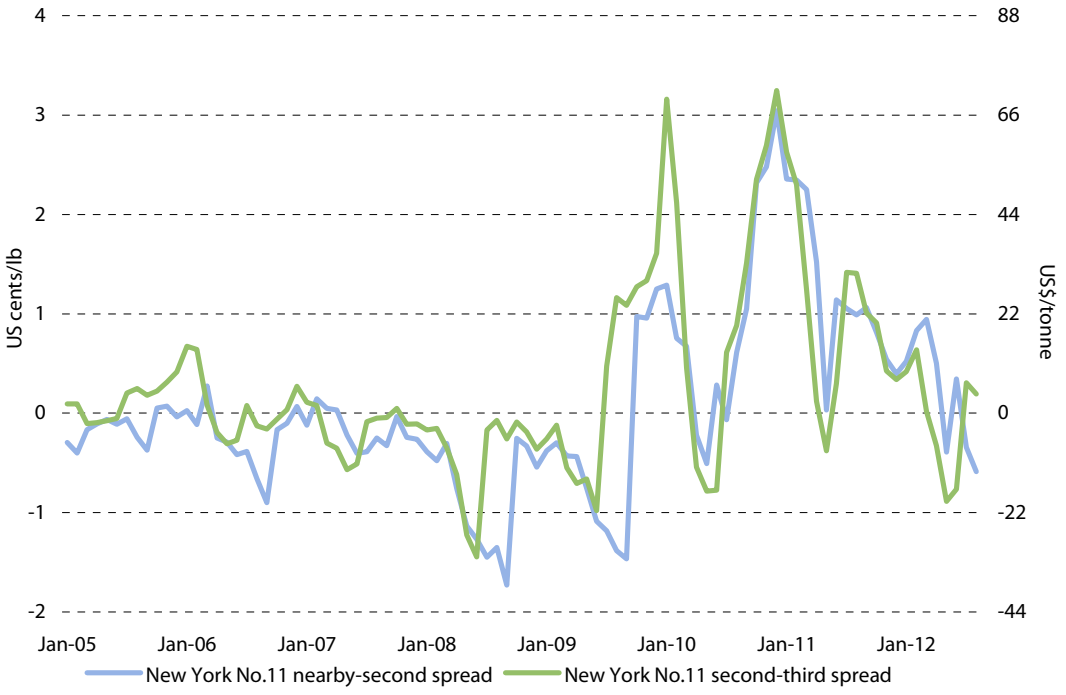
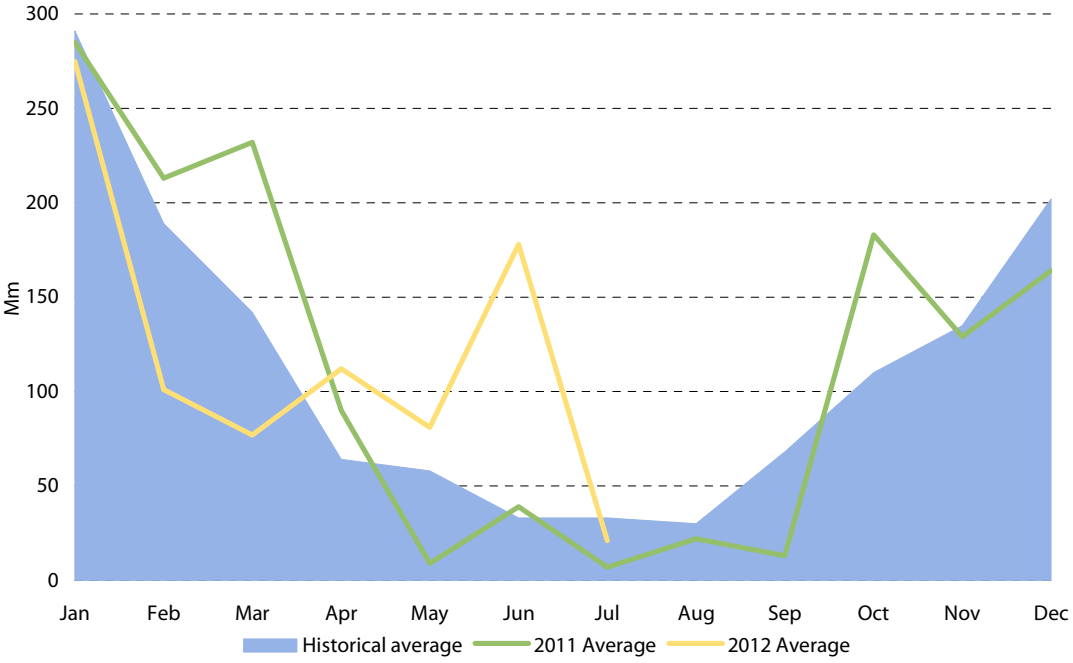


Diagram 1.3: Monthly rainfall in São Paulo state — 2012 vs. 2011 and historical average



A further weather risk is the progress of the annual monsoon across India, which is vital for the development of the cane crop. While cumulative rainfall across the country has improved during August (total rainfall was around 14% below the historical average as of August 22nd compared to being 22% lower at the end of July), there is particular concern over the level of rains received so far in the main cane growing regions of Maharashtra and Uttar Pradesh, where rainfall has been as much as 20-40% lower.

If production prospects in Brazil and India deteriorate further over the coming months, then it will be difficult for sugar prices to fall towards the level of ethanol parity in Brazil, suggesting that there is still upside if the increases in area that have been seen during the first quarter of the year are not translated into a commensurate increase in sugar output.

Sugar market fundamentals

Global supply/demand

Table 1.1 provides our latest estimates of the global supply/demand balance for sugar on an October/September crop year basis between 2003/04 and 2012/13. Since the last *Sugar Quarterly*, our estimates for global production surpluses in the 2011/12 and 2012/13 seasons have tightened, although we still anticipate sizable overall surpluses in both crop years. This is primarily a result of a downgrade we have made to our sugar production estimate for Centre/South Brazil since the last *Sugar Quarterly*. Given that a large majority of 2011/12 sugar crops around the world have now been harvested, most of the fundamental focus is now on the 2012/13 global balance.

Overall, global production in 2011/12 is now estimated to increase by 4.2% to 174.7 million tonnes, raw value. With consumption estimated at 166.3 million tonnes (including an allowance for unrecorded trade of 2.2 million tonnes), we are currently anticipating a global production surplus of 6.1 million tonnes. For 2012/13, output is projected to increase further by 2.3% to 178.6 million tonnes, with global consumption rising by 1.7% to 169.1 million tonnes. Again assuming an allowance for unrecorded trade, we are currently forecasting a global surplus of 7.2 million tonnes in 2012/13 (Diagram 1.4).

Table 1.1: World sugar balance — by October/September crop years[1], 2003/04-2012/13 ('000 tonnes, raw value)

	World Consumption	World Production	Apparent Surplus/ Deficit	Statistical Adjustment [2]	Actual Surplus/ Deficit	Actual Stock Total	LMC Stock Index [3]
2003/04	145,287	143,576	(1,711)	(2,294)	(4,006)	54,806	1.49
2004/05	147,269	143,823	(3,446)	(1,373)	(4,819)	49,987	1.38
2005/06	150,123	151,104	981	(2,642)	(1,660)	48,327	1.33
2006/07	155,446	164,823	9,377	(3,039)	6,338	54,666	1.44
2007/08	159,090	167,398	8,307	(1,993)	6,314	60,980	1.56
2008/09	160,475	149,969	(10,506)	(1,414)	(11,919)	49,061	1.26
2009/10	163,085	159,995	(3,090)	(1,292)	(4,382)	44,679	1.14
2010/11	162,675	167,548	4,873	(2,193)	2,669	47,347	1.20
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Notes:
1. Individual country crop years are adjusted to reflect the international sugar season running October/September.
2. A statistical adjustment is included to account for unrecorded consumption.
3. Year-End index of the stock total divided by world consumption (1980 = 1.00).
4. A longer series of this data may be found at the end of this chapter.

A key change we have made to our global supply/demand balances has been to reduce our 2012/13 production estimate for Centre/South Brazil. Given that their campaign typically runs from April/December, this has impacted on both the 2011/12 and 2012/13 October/September global balances. The increased rains that the region received between April and June have been beneficial for agricultural yields meaning that we have increased our estimate of total cane output (to 493 million tonnes, compared to 470 million tonnes previously). However, the flipside of this is that it has also proved detrimental for sucrose formation and ATR yields, which are now lower than last year and well below historical levels. As a result we have reduced our estimate of ATR yields with the result that sugar production is now estimated at around 30 million tonnes, tel quel, around 1.5 million tonnes lower than our previous estimate.

Diagram 1.4: World sugar supply/demand balance

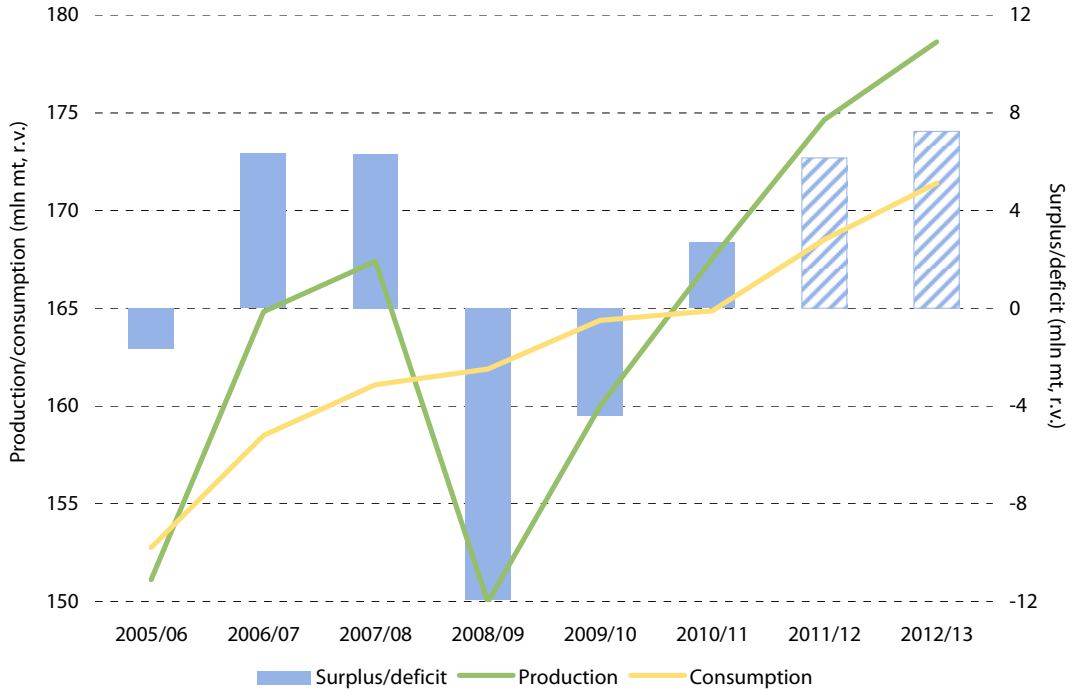
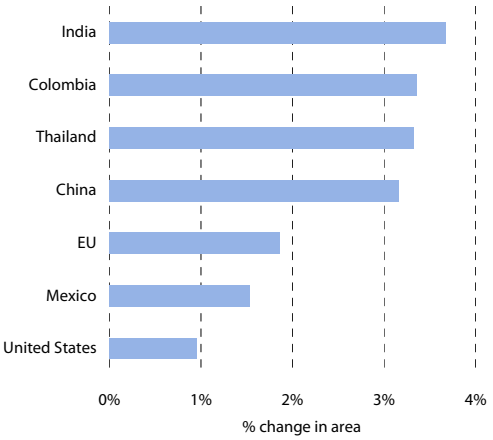


Diagram 1.5: % change in area under sugar crops for selected countries, 2012/13 vs. 2011/12



Elsewhere, figures for area planted under cane across the northern hemisphere are now becoming clearer, with the result that we have revised a number of 2012/13 sugar production forecasts. Diagram 1.5 reveals the projected increases in area planted to cane/beet for a selection of producers located in the northern hemisphere.

Based on the revised area data that we have received we have made upwards revisions to our cane sugar production forecasts for Mexico, the US, Guatemala and China.

Where we do not have further information at this stage, our production forecasts are currently based on trend yields, implying 'normal' weather conditions. However, whether the increases in area that have been reported for these industries translates into higher sugar production will depend heavily on the weather conditions over the coming months, which is very difficult to predict! If the moderate El Niño weather phenomenon, which has been forecast, proves detrimental to these crops then the global production surplus for 2012/13 will inevitably fall short of our projections.

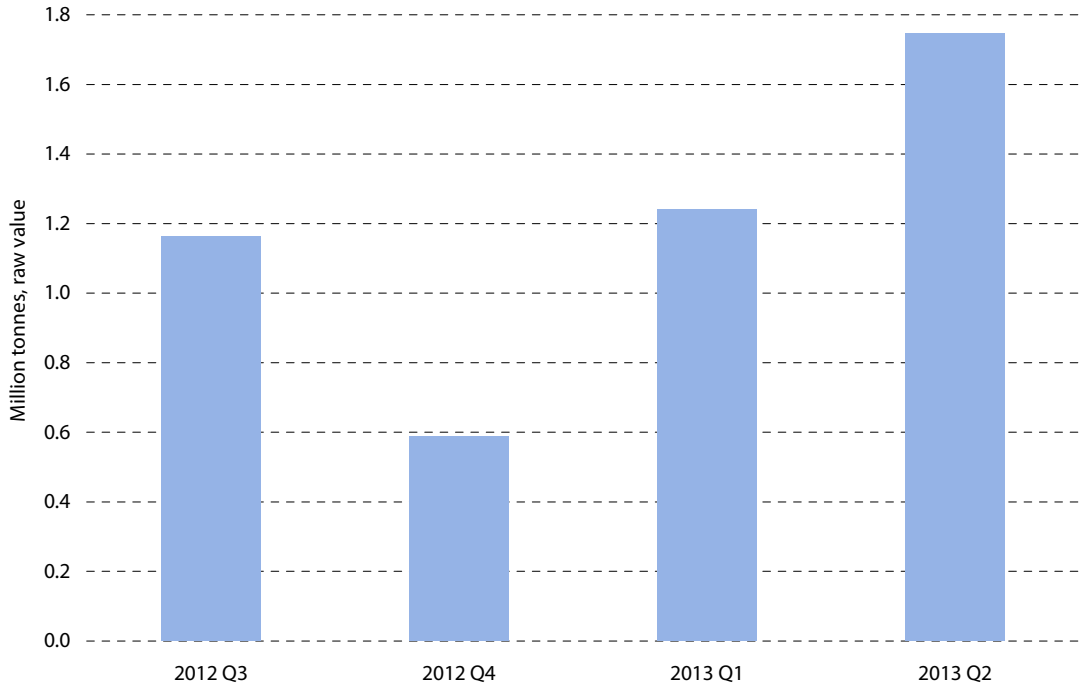
In the northern hemisphere, the first indications of the performance of this year's crop are becoming available, with the first results of beet tests beginning to be released detailing progress of sugarbeet development across Europe. Early results that have been released have shown a mixed picture. In East Europe, early beet tests for Russia have revealed that beet yields are likely to be similar to in 2011/12, and, because of capacity improvements, we have increased their production estimate. In contrast, early beet tests released for the European Union (for France and Germany) reveal that the sucrose content and yields are relatively poor compared to last year, meaning that we have reduced the EU production forecast slightly.

Raw sugar

Raw sugar trade flows

Despite reducing our estimates of the global production surplus for the 2012/13 crop year, our latest analysis of the future raw sugar trade flows still show some sizeable surpluses for the coming quarters, which should continue to exert pressure on prices going forward (Diagram 1.6).

Diagram 1.6: Raw sugar quarterly trade balances



Our nearby Q3 raw sugar balance has shrunk considerably on the back of some significant import demand from China. Based on the latest shipments and nominations data, their raw sugar purchases in Q3 are estimated at around 780,000 tonnes, raw value (see Table 1.3 at the end of this chapter). Indeed the latest nominations from Brazil suggest that their import demand in Q3 is even higher than this, although we have netted out around 400,000 tonnes

from this based on news that a number of cargoes have been washed out and diverted to other countries in Asia such as Bangladesh and Malaysia. One of the reasons for the diversion of these cargoes has been an improved outlook for the 2012/13 cane crop in China. We have increased our production forecast by around 0.5 million tonnes and this has reduced their projected import demand for next year, thus increasing our projected raw sugar surpluses between 2012 Q4 and 2012 Q2. Total imports into China in 2012/13 are expected to be less than half the quantity imported in 2011/12.

Elsewhere, given the downwards revision we have made to our production estimate for Centre/South Brazil (from 31.5 to 30 million tonnes, tel quel), this has impacted on their potential export availability in Q4 in particular, which means that the surplus that we project is much narrower than that in the previous *Sugar Quarterly*.

Raw sugar price outlook

While the raw sugar trade flows indicate that there is likely to be considerable surpluses of raw sugar export availability looking ahead, there is one key factor which could add some support for raw sugar prices in the future — namely the progress of the 2012/13 harvest in Centre/South Brazil. With more than 50% of the harvest still to be completed and the risk of El Niño-induced rains during the spring months, the outlook for cane and sugar/ethanol production remains uncertain. Given the total amount of cane crushed so far, what is becoming increasingly likely, however, is that millers may not be able to harvest all of the cane left in the ground, particularly if there are further weather delays.

The challenge that is posed for millers is summarised in Diagram 1.7. The diagram reveals the average daily crushing rate that will be required for mills to process all of its cane by mid-December, after which the onset of summer rains means that cane quality deteriorates to the point where most mills must cease operations. These rates — ranging between 1.83 million tonnes per day for a total cane crop of 470 million tonnes to 1.98 million tonnes per day for cane output of 490 million tonnes — are contrasted with the actual average daily rates achieved during this period during the past three seasons. It demonstrates that actual crushing rates have varied considerably from year to year and depend heavily on the weather. However, if the industry is to crush 490 million tonnes, it must match the crush rate that was achieved in 2009/10, well above the level achieved in the last two years. Moreover, around 14 mills, with a crushing capacity of 30 million tonnes per year, are not operating this year. While others may have expanded, this comparison nevertheless indicates that it will be challenging for the industry to crush all of the available cane this season unless the weather is exceptionally favourable, and the mill can continue to crushing until the end of the year.

Diagram 1.7: Cane crushing rates in C/S Brazil

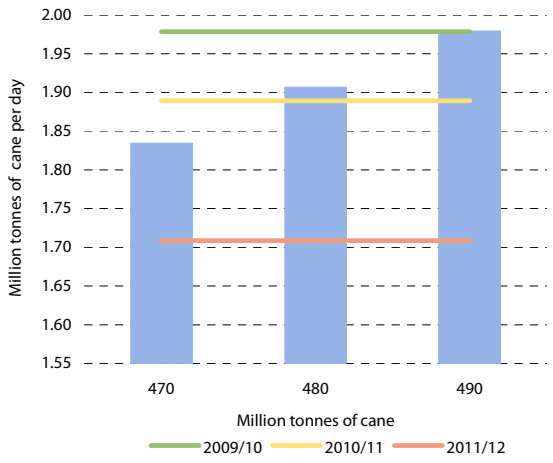
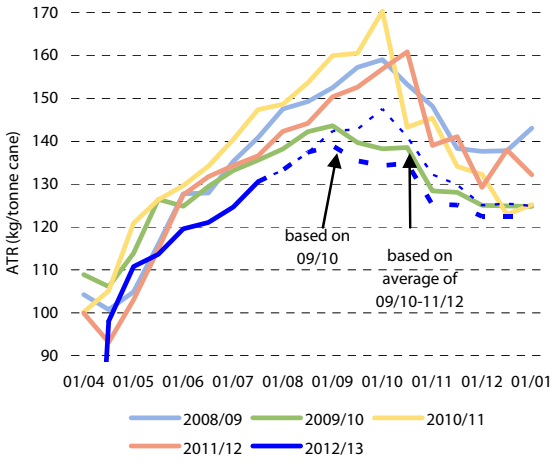


Diagram 1.8: ATR yields in C/S Brazil

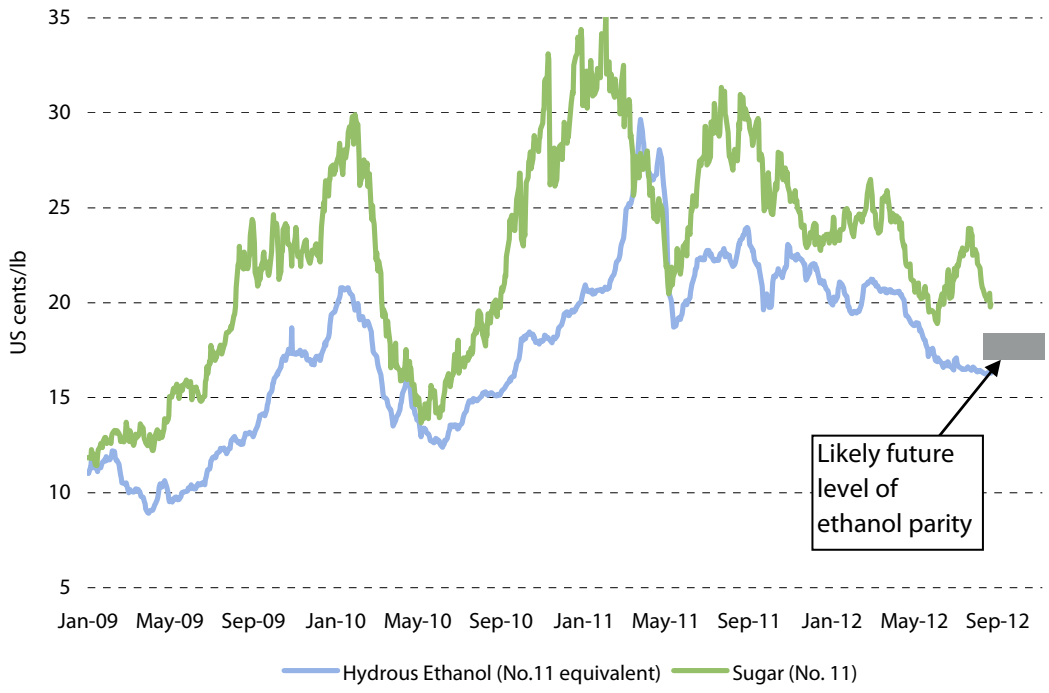


Even if all the cane can be crushed, cane quality so far in 2012/13 has been well below previous years. While recent dry weather has helped cane to ripen, high levels of soil moisture will moderate the extent of the increase. Diagram 1.8 charts our projections of the evolution of ATR yields under two outcomes for the weather and are based on the trajectories in past seasons (2009/10, when the weather was also very wet and influenced by El Niño, and a more optimistic outcome based on an average from 2009/10 to 2011/12). Both show improvements over the coming months, but both result in low averages for the season as a whole: 129 kg and 131kg, respectively.

In terms of product mix, sugar currently remains more remunerative compared to ethanol in Brazil (Diagram 1.9). If we assume that the product mix follows a similar trend to last year, this would imply around 49% of product going to sugar.

Based on these scenarios, final sugar output could range between 29-31 million tonnes, tel quel. Our latest production estimate for the Centre/South is based on the middle of this range. This remains below the market consensus, which currently ranges between around 31-32 million tonnes. If final production does total just 30 million tonnes or even lower, then this will undoubtedly provide support to prices.

Diagram 1.9: Sugar vs. ethanol prices (ethanol on a sugar-equivalent basis)



Nevertheless, even if final Brazilian production disappoints, our analysis of future global supply/demand and trade flows still suggest that there will be a large surplus of raw sugar still available. Based on this, we therefore believe that prices should continue to fall to the level of ethanol parity in Brazil. Diagram 1.10 reveals that this is currently around 16 cents/lb. However, ethanol prices are currently at a low point in Brazil and traditionally increase in the second half of the year as supply slows down. For this reason, we believe that the level of ethanol parity could increase in the fourth quarter of the year as domestic ethanol prices rise. Based on an exchange rate of R$2.0/US$, our ethanol price forecast for 2012 Q4 translates into an ethanol parity price of around 18-19 cents/lb on a No.11 equivalent (as represented by the shaded area in Diagram 1.9). On this basis, raw sugar prices should approach this level over the course of the remainder of this year. After that in Q1 next year, assuming that the crops in Brazil and India perform as expected, then the concept of ethanol parity becomes less

important as Brazilian millers are no longer producing, creating the risk that prices could even fall below this level. However, these price forecasts are based on our current supply/demand projections, where we have taken the view that a moderate El Niño weather pattern should not have a significant negative impact on production in most countries. If the El Niño influence proves to be stronger than anticipated and affects a number of sugar crops in Asia and Central America, prices are likely to return to a band in excess of 20 cents/lb, reflecting the fact that a strong signal will need to be sent to Brazil to produce as much sugar as possible.

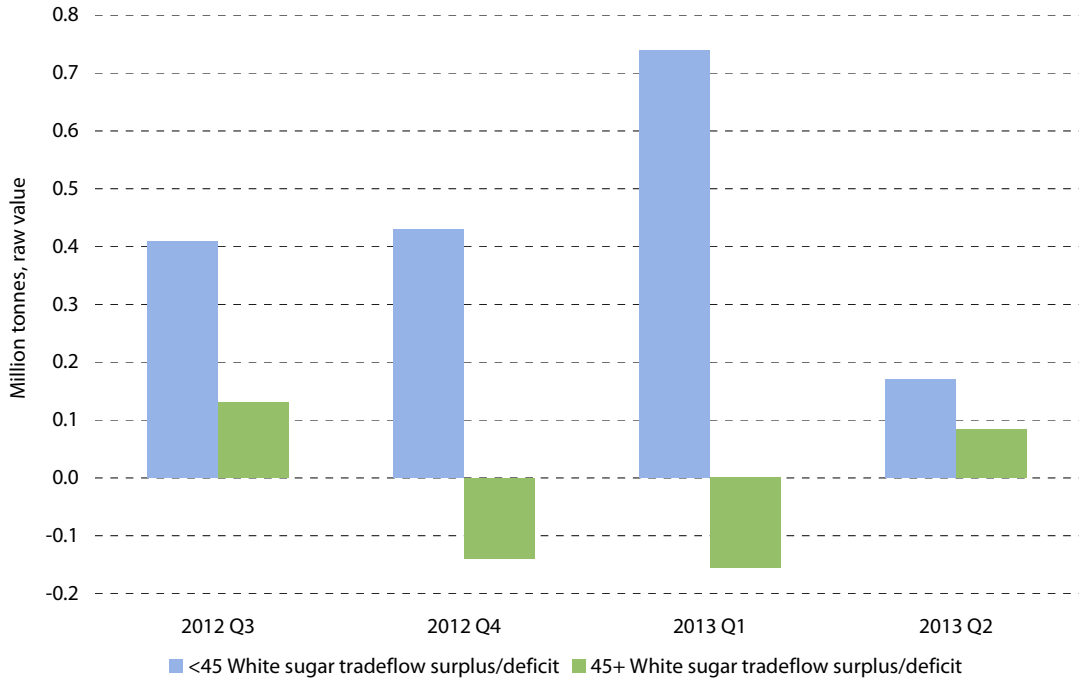
White sugar and the white premium

White sugar trade flows

Diagram 1.10 presents our projections of the potential white sugar trade flows, which have narrowed over the past quarter, in particular for lower quality white sugar (as represented in green in the diagram). This is principally the result of a reduction in our estimate of lower quality white export availability from Centre/South Brazil. Brazilian millers have focused predominately on VHP exports so far this year, and, when coupled with the fact that we have reduced our production estimate for the country by 1.5 million tonnes, we now believe that cristal sugar exports will total just 2.2 million tonnes, raw value, far lower than the three million tonnes exported in their 2011/12 campaign.

Similarly, Thai millers have also focussed more on raw sugar exports as physical premiums for raw Thai sugar have reached their highest levels in around two years, meaning that millers have diverted less tonnage to their remelt programme and lower quality white export availability has fallen. The result of this is that the lower quality white sugar balances are broadly balanced and even show small deficits in the fourth quarter of this year and the first quarter of 2013.

Diagram 1.10: White sugar quarterly trade balances



However, more than offsetting this is the fact that we still anticipate a surplus of refined (45 ICUMSA) sugar over the next four quarters. The pace of refined sugar exports from the EU earlier in the year was slower than expected, increasing availability in Q3. Meanwhile, following upgrades to our 2012/13 production forecasts for Russia, Guatemala and Mexico, we

have increased their refined sugar export availability. Demand for refined sugar has also weakened following a period of strong offtake ahead of the Ramadan festival during Q2.

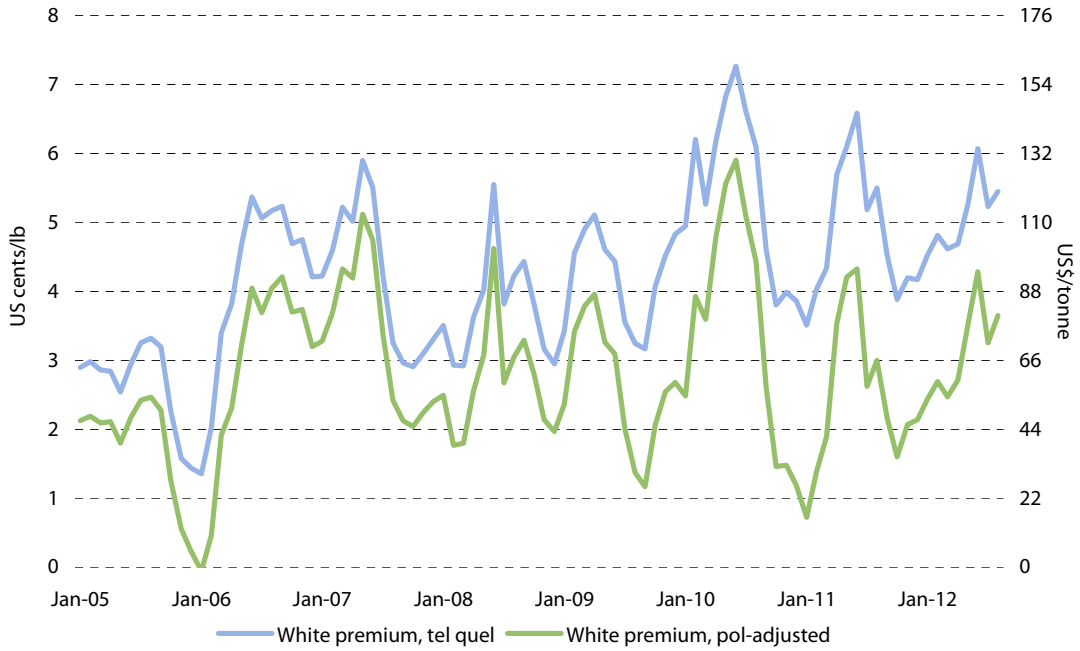
Overall, therefore, we still have trade surpluses for the white sugar market as a whole. However, what is clearly noticeable is that our flow surpluses for white sugar are far lower than those for raw sugar. As we discuss in greater detail in the section below, this trend should help to limit any big downwards movement in the white premium in the coming months.

White sugar price outlook

The nearby white premium has generally increased over the course of the year-to-date, although on a *tel quel* basis it has fallen back slightly to a level of around US$110-120 per tonne over the course of the past month (Diagram 1.11).

At this time of the year, with the Indian, EU and Thai white sugar export campaigns beginning to wind down, focus for the white premium tends to switch to the destination refineries that focus on the re-export business, such as Dubai. While the prospect of refined sugar trade flow surpluses over the next three quarters should dampen any potential gains in the white premium during this period, the *tel quel* premium will still have to remain at a level to encourage these refineries to export sugar, i.e. to cover their operating costs, especially in the near term given the lower supply from traditional refined sugar exporters. Given current global oil prices of around US$100 per barrel and a global raw sugar price of 19 cents/lb, we currently estimate this cost to be around US$110-120 per tonne for destination refineries such as Dubai. With EU exports a known quantity, we expect the white premium to remain supported over the next few months, although going into 2013, much will depend on whether India allows further exports to take place, which would boost the availability of low quality sugars (see Table 1.2 at the end of this chapter).

Diagram 1.11: World white premium basis first position futures (No.5 vs. No.11)



Price forecasts and quarterly trade flow statistics by country

In the pages that follow, we present a series of tables detailing our latest price forecasts for raw and white sugar and our latest quarterly trade flow estimates/forecasts by country for raw and white sugar.

Table 1.2: World sugar prices and forecasts, 2005-2013 (US cents/lb, unless indicated)

Year, Quarter	New York No.11 Raw Sugar [1]	LDP Raw Sugar [2]	LIFFE No.5 White Sugar [1]	LDP White Sugar	White Premium (tel quel) [3]	White Premium (pol adjusted) [4]	LMC Stock Index [5]
2005.Q1	8.91	8.86	11.89	11.92	2.98	2.20	1.37
2005.Q2	8.62	8.69	11.41	12.05	2.78	2.03	1.38
2005.Q3	9.97	9.92	13.42	14.72	3.45	2.58	1.38
2005.Q4	12.46	11.90	13.98	14.08	1.52	0.43	1.36
Average 2005	**9.99**	**9.84**	**12.67**	**13.19**	**2.68**	**1.81**	**1.36**
2006.Q1	17.06	16.93	19.37	19.22	2.32	0.84	1.19
2006.Q2	16.43	16.46	21.12	21.37	4.70	3.27	1.22
2006.Q3	13.40	-	18.96	-	5.57	4.40	1.33
2006.Q4	11.64	-	17.09	-	5.45	4.44	1.35
Average 2006	**14.63**	**16.69**	**19.14**	**20.29**	**4.51**	**3.24**	**1.35**
2007.Q1	10.65	-	15.28	-	4.63	3.71	1.38
2007.Q2	9.18	-	14.63	-	5.45	4.65	1.42
2007.Q3	9.68	-	13.24	-	3.56	2.72	1.44
2007.Q4	10.10	-	13.01	-	2.90	2.02	1.48
Average 2007	**9.90**	**-**	**14.04**	**-**	**4.14**	**3.28**	**1.48**
2008.Q1	12.54	-	15.77	-	3.23	2.14	1.53
2008.Q2	11.21	-	15.77	-	4.56	3.58	1.56
2008.Q3	13.06	-	17.47	-	4.40	3.27	1.56
2008.Q4	11.61	-	14.74	-	3.13	2.12	1.49
Average 2008	**12.10**	**-**	**15.93**	**-**	**3.83**	**2.78**	**1.49**
2009.Q1	12.73	-	17.08	-	4.34	3.24	1.32
2009.Q2	14.71	-	19.50	-	4.79	3.51	1.28
2009.Q3	20.55	-	23.70	-	3.15	1.36	1.26
2009.Q4	23.64	-	27.73	-	4.09	2.03	1.18
Average 2009	**17.91**	**-**	**22.00**	**-**	**4.09**	**2.53**	**1.18**
2010.Q1	24.39	-	29.86	-	5.47	3.35	1.03
2010.Q2	15.53	-	22.32	-	6.79	5.44	1.11
2010.Q3	20.17	-	26.38	-	6.21	4.45	1.14
2010.Q4	29.01	-	33.03	-	4.03	1.50	1.02
Average 2010	**22.27**	**-**	**27.90**	**-**	**5.62**	**3.69**	**1.02**
2011.Q1	30.50	-	34.07	-	3.56	0.91	0.95
2011.Q2	24.46	-	30.47	-	6.02	3.89	1.08
2011.Q3	28.68	-	34.19	-	5.52	3.02	1.20
2011.Q4	24.74	-	29.36	-	4.62	2.46	1.17
Average 2011	**27.10**	**-**	**32.02**	**-**	**4.93**	**2.57**	**1.17**
2012.Q1	24.56	-	29.05	-	4.49	2.35	1.25
2012.Q2	21.18	-	26.47	-	5.29	3.45	1.22
2012.Q3	*20.70*	-	*26.30*	-	*5.60*	*3.80*	*1.33*
2012.Q4	*18.50*	-	*23.94*	-	*5.44*	*3.83*	*1.30*
Average 2012	***21.24***	**-**	***26.44***	**-**	***5.20***	***3.36***	***1.30***
2013.Q1	*18.00*	-	*22.99*	-	*4.99*	*3.42*	*1.33*
2013.Q2	*17.60*	-	*22.36*	-	*4.76*	*3.23*	*1.38*

Comments:

1. First position futures prices.
2. London Daily Price adjusted to f.o.b. Caribbean Port, in bulk, using the CARUK freight rate.
3. Premium calculated as the difference between the LCE No.5 white sugar first position future price and the New York No.11 raw sugar first position future prices.
4. Incorporates a pol adjustment and expressed per pound of white sugar.
5. Refers to end of the period stocks.

Table 1.3: Quarterly raw sugar trade, 2012-2013 ('000 tonnes, raw value)

Export Supply	2012.Q3	2012.Q4	2013.Q1	2013.Q2	**Import Demand**	2012.Q3	2012.Q4	2013.Q1	2013.Q2
Cuba	99	11	345	365	EU	618	720	830	775
D Republic	59	20	80	121	Russia	82	70	110	189
El Salvador	57	32	134	148	Ukraine	0	0	0	0
Guatemala	119	231	443	290	Other	327	220	241	276
Mexico	117	61	95	96	**Europe**	**1,026**	**1,009**	**1,182**	**1,239**
Nicaragua	64	46	121	94	Canada	374	422	232	315
Other	59	37	245	206	USA	895	531	498	500
C/N America	**574**	**438**	**1,462**	**1,319**	Other	54	66	56	64
Argentina	9	84	20	0	**C/N America**	**1,323**	**1,019**	**786**	**879**
Brazil	7,092	5,437	4,214	6,134	Venezuela	208	139	82	143
Colombia	74	49	52	53	Other	16	19	23	21
Other	79	129	63	70	**S America**	**224**	**158**	**105**	**164**
S America	**7,253**	**5,699**	**4,349**	**6,257**	Bangladesh	315	234	215	277
India	200	0	0	0	China	782	184	204	460
Philippines	150	25	40	39	Indonesia	702	852	622	655
Thailand	1,510	908	1,043	1,383	Iran	483	279	145	272
Other	8	39	73	24	Japan	502	403	238	365
Asia	**1,868**	**972**	**1,156**	**1,447**	Malaysia	525	402	384	372
Malawi	15	38	13	12	Persian Gulf	613	193	227	604
South Africa	107	87	49	88	Saudi Arabia	334	317	351	332
Swaziland	121	130	84	77	South Korea	461	392	364	428
Zimbabwe	89	75	40	60	Other	939	567	517	577
Other	250	181	147	132	**Asia**	**5,655**	**3,823**	**3,266**	**4,342**
Africa	**581**	**510**	**333**	**369**	Algeria	473	609	440	449
Australia	902	876	668	732	Egypt	491	370	116	224
Other	56	51	27	8	Morocco	137	195	107	227
Oceania	**958**	**927**	**695**	**740**	Nigeria	115	278	283	289
					Other	136	88	111	134
					Africa	**1,352**	**1,540**	**1,057**	**1,322**
					New Zealand	62	69	50	55
					Other	5	8	7	12
					Oceania	**67**	**77**	**57**	**66**
World Total	**11,235**	**8,546**	**7,995**	**10,132**		**9,648**	**7,626**	**6,453**	**8,012**

Quarterly Raw Sugar Net Trade Balance, 2012-2013

	2012.Q3	**2012.Q4**	**2013.Q1**	**2013.Q2**
World Supply	11,235	8,546	7,995	10,132
World Demand	9,648	7,626	6,453	8,012
Statistical Adjustment	*(424)*	*(332)*	*(301)*	*(374)*
World Balance	**1,163**	**588**	**1,241**	**1,747**

Table 1.4: Quarterly white sugar trade, 2012-2013 ('000 tonnes, raw value)

Export Supply	2012.Q3	2012.Q4	2013.Q1	2013.Q2	**Import Demand**	2012.Q3	2012.Q4	2013.Q1	2013.Q2
Belarus	84	65	74	111	EU	361	181	118	195
EU	764	495	494	463	Norway	42	39	31	35
Russia	76	146	47	55	Other	148	168	163	163
Other	271	413	140	212	**Europe**	**552**	**388**	**312**	**393**
Europe	**1,195**	**1,118**	**754**	**842**	Mexico	5	188	151	107
Guatemala	92	144	275	181	USA	291	211	198	199
Mexico	259	136	211	214	Other	109	89	79	89
Other	85	87	125	126	**C/N America**	**405**	**489**	**428**	**395**
C/N America	**436**	**366**	**611**	**521**	Chile	88	204	104	77
Brazil	656	877	607	890	Peru	29	0	50	96
Colombia	211	221	161	166	Other	37	83	133	74
Other	95	115	23	43	**S America**	**154**	**287**	**288**	**247**
S America	**962**	**1,214**	**791**	**1,098**	China	19	122	59	77
India	606	160	382	504	Indonesia	21	51	68	122
Malaysia	66	51	62	63	Sri Lanka	160	148	94	191
Thailand	421	577	663	879	Vietnam	85	3	0	62
Other	771	699	826	793	Other	1,522	1,621	1,621	1,979
Asia	**1,864**	**1,488**	**1,933**	**2,239**	**Asia**	**1,808**	**1,946**	**1,842**	**2,430**
Algeria	161	158	162	166	Angola	81	87	83	83
South Africa	91	74	42	55	Libya	79	78	70	71
Swaziland	20	22	14	11	Sudan	228	0	0	112
Other	342	330	265	213	Other	1,088	1,052	806	981
Africa	**614**	**584**	**483**	**445**	**Africa**	**1,476**	**1,217**	**959**	**1,248**
Australia	70	54	35	53	**Oceania**	**18**	**23**	**20**	**17**
Other	6	7	5	5					
Oceania	**77**	**61**	**40**	**58**					
World Total	**5,147**	**4,830**	**4,612**	**5,204**		**4,413**	**4,349**	**3,849**	**4,730**

Quarterly White Sugar Net Trade Balance, 2012-2013

	2012.Q3	**2012.Q4**	**2013.Q1**	**2013.Q2**
World Supply	5,147	4,830	4,612	5,204
World Demand	4,413	4,349	3,849	4,730
Statistical Adjustment	*(196)*	*(192)*	*(180)*	*(221)*
World Balance	**539**	**289**	**583**	**253**

Chapter 2: National Supply/Demand Balances

Key changes to national supply/demand balances

- Above average rainfall across ***Centre/South Brazil*** between April and June means there will now be more cane available than we had previously anticipated. However, it has also proved detrimental to ATR yields, with the result that we have downgraded our production estimate by around 1.5 million tonnes since the previous *Sugar Quarterly* to 30 million tonnes, tel quel.

- In ***China***, plentiful rainfall has been good for cane development in the southern provinces over the past few months. Early estimates of areas and yields suggest that this year's crop will be bigger than last year. We have revised upwards our estimate of sugar production to 13.5 million tonnes, raw value (12.5 million tonnes, white value).

- In ***India***, expectations of a 4% increase in area have been offset by a poor start to the monsoon season in western India, in particular in Maharashtra. We still expect sugar production to be in the range of 24-25 million tonnes, white value, although the progress of the monsoon will have to be carefully monitored over the next few months.

- Early beet tests in ***Russia*** suggests that the yields and sucrose content are both looking strong and we expect that 2012/13 production will at least match the record 2011/12 level.

- Elsewhere in the world, we have made minor upward revisions to our 2012/13 production forecasts for Pakistan, United States, Mexico and South Africa, although these has been offset by downgrading our forecasts for Indonesia, Australia and EU.

Supply/demand balances for selected countries

China

The 2011/12 harvest finished in May with sugar production totalling 11.5 million tonnes, white value (12.4 million tonnes, raw value), up 1.1 million tonnes from 2010/11. Given consumption of around 13.7 million tonnes, white value, this has left a shortfall of around 2.2 million tonnes this year. However, China has been importing far greater quantities than this. Total official imports between October and July this year were around 3.1 million tonnes, white value, compared to 1.2 million tonnes over the same period in 2010/11. When adding in an estimated 500,000 tonnes of unofficial imports of white sugar from Thailand and Vietnam this means that around 3.6 million tonnes of imports have been made during the first three quarters of 2011/12. Moreover, around 620,000 tonnes of additional sugar imports have been nominated from Brazil for August and September shipment. A consequence of this additional sugar entering the country has been that domestic prices have fallen, with the ex-factory price in Guangxi falling by 13% since the start of the year (Diagram 2.1).

However, according to industry sources, Chinese traders have been reselling some of these additional sugar cargoes on the international market. This is due to the prospect of a better-than-expected domestic crop and the government's one million tonnes purchase programme, which has already bought in half a million tonnes of strategic stock. So far China has diverted around 400,000 tonnes of Brazilian sugar to destinations including Bangladesh, Indonesia and Malaysia. Overall, we now expect China to import around 3.9 million tonnes, white value, which would represent a considerable stock build up of around 1.6 million tonnes (Table 2.1).

Looking ahead to the 2012/13 crop, we are starting to receive some estimates of areas planted under cane and beet in the country. Early indications suggest that cane area is up 3% from

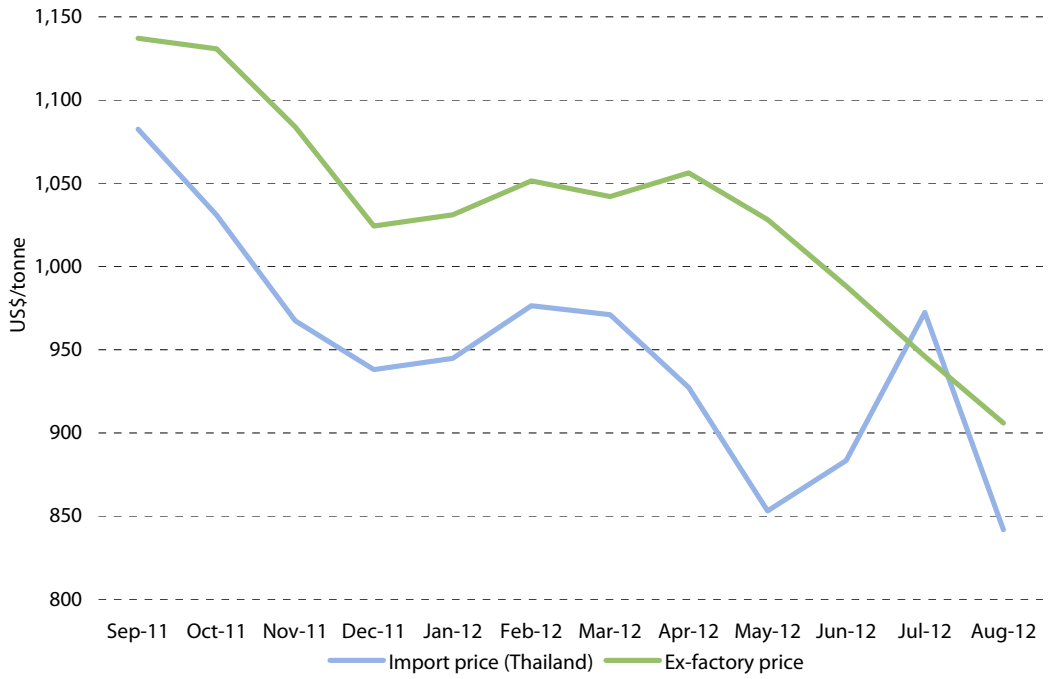
2011/12 and that beet area has increased by 5%. Guangxi has enjoyed plentiful rainfall over the last few months, which has been good for the cane development. Assuming average cane yields, we are now estimating overall sugar production of 12.5 million tonnes, white value, some 500,000 tonnes higher than our previous forecast. We are expecting to gain a clearer picture of the 2012/13 crop from the CSA meetings scheduled for September and November, and we feel that there could be some upside to our production forecasts. Given the production and consumption figures, it indicates China's import requirement is likely to be around 1.8 million tonnes in 2012/13, more than 50% lower than 2011/12.

Table 2.1: Sugar balance projections: China ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		13,513	11,771	11,361	12,446	13,507
Consumption	Sugar	14,829	14,887	14,675	14,892	15,218
	HFCS	843	1,118	1,386	1,750	2,011
	% HFCS	*5*	*7*	*9*	*11*	*12*
Imports -	Total	1,099	1,571	2,301	4,275	1,785
	Raws	925	1,375	1,880	3,400	1,425
	Whites	173	196	421	875	360
Exports -	Total	72	94	82	65	74
	Raws	6	4	5	5	5
	Whites	66	90	77	60	69
Apparent Stock Change		(289)	(1,639)	(1,095)	1,764	0
Per Capita Consumption (kg)		11.1	11.1	10.9	11.0	11.2

Note: Crop year beginning Q4.

Diagram 2.1: The import parity price and domestic price in China



There are strong rumours that the Chinese government will soon begin a second-tranche purchase programme for 0.5 million tonnes of sugar for its strategic reserves. Unlike the

first-tranche which set a minimum purchase price of RMB 6,550 per tonne, the second-tranche is likely to set the same price as the maximum price. This is due to the fact that sugar factories in China are eager to reduce their stocks, as they struggled to do so over the last few months when domestic prices have fallen significantly. Most sugar factories took a wait-and-see attitude in the first-tranche government purchase programme, in order to secure their most remunerative price. As a result, it took the government eight auctions to buy 0.5 million tonnes. We will keep a close eye on the government's movements this time, and the impact these will have on domestic prices.

India

India's 2011/12 campaign is virtually over and final production is now expected to total just over 26 million tonnes, white value (28.1 million tonnes, raw value). This represents a 7% increase from last year, principally on the back of reduced cane diversion in Uttar Pradesh, where gur producers struggled to compete with the high SAP that was set by the government in the run up to state elections. In Maharashtra, output was similar to last year, despite an increase in cane area. This was because of lower cane yields that resulted from poor rainfall and an increase in the proportion of ratoon cane.

Table 2.2: Sugar balance projections: India ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		15,290	20,392	26,303	28,143	26,094
Consumption		24,784	25,327	24,240	24,784	25,279
Imports -	Total	3,652	3,996	50	537	537
	Raws	*3,427*	*3,018*	*50*	*531*	*537*
	Whites	*225*	*978*	*0*	*7*	*0*
Exports -	Total	183	150	2,850	3,411	1,352
	Raws	*72*	*0*	*0*	*1,000*	*0*
	Whites	*112*	*150*	*2,850*	*2,411*	*1,352*
Apparent Stock Change		(6,024)	(1,089)	(737)	485	(0)
Per Capita Consumption (kg)		20.6	20.8	19.6	19.7	19.8

Note: Crop year beginning Q4.

Attention has now switched to the upcoming 2012/13 season. Initial reports on area planted have begun to appear. The Ministry of Agriculture has put area at 5.29 million hectares by early August. However, there are major differences at the regional level. In Uttar Pradesh and north India, cane area is set to increase as high cane prices and lack of attractive alternatives have overridden concerns over arrears. Similarly, early reports also indicate that Tamil Nadu will see a substantial increase in cane area. On the other hand, in Maharashtra, cane area is reported to be down 8% from last year. We had already expected a drop in area as low reservoir levels had led to farmers switching to less thirsty crops. However, the situation has been exacerbated by a poor start to the monsoon and escalating soybean prices. As a result, some farmers in Maharashtra have uprooted their cane to use as fodder, thus clearing their fields for other crops. From a farmer's point of view, this option has been made particularly attractive by a government fodder procurement scheme that is offering higher prices compared to cane.

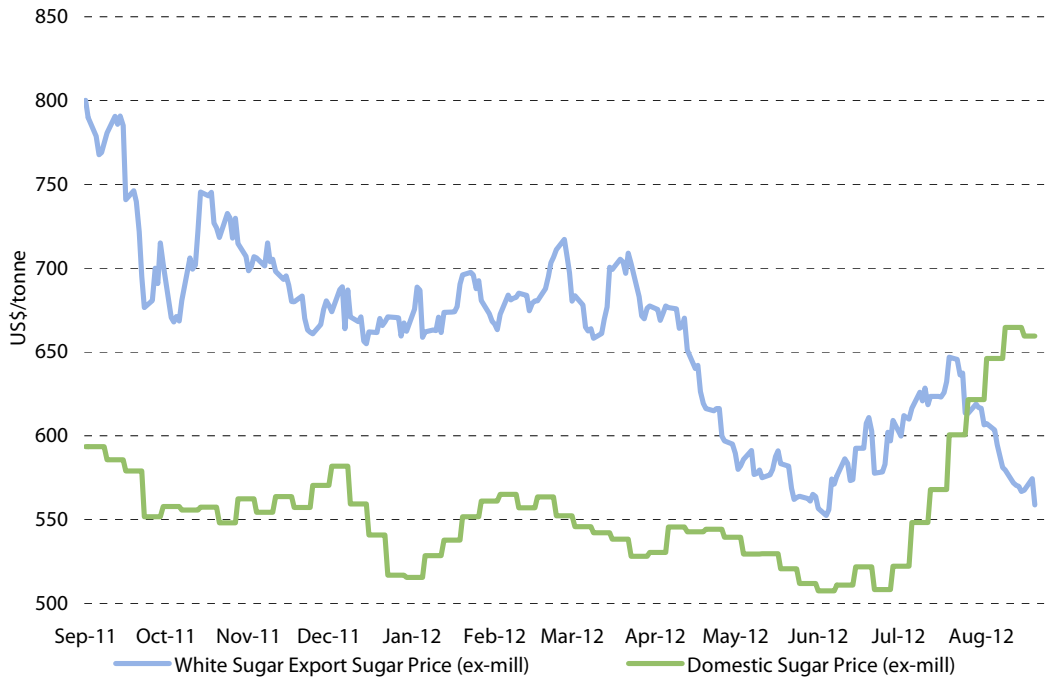
A big concern has arisen over the monsoon. By 22nd August, rains were 14% below the long-run average. Rainfall has been particularly bad in cane growing areas and was 20-40%

lower than normal in the main cane growing regions of Maharashtra, Karnataka, Tamil Nadu and Uttar Pradesh. This could be detrimental to yields, which we already expect to be lower in Maharashtra due to an increase in age of the cane. We have updated our forecasts with latest information regarding area and revised yield estimates (based on historical relationships between rainfall and cane yields by region, and up to date monsoon reports). Although slightly lower than our previous estimate, we still expect output to fall in the range of 24-25 million tonnes, white value, in 2012/13. However, with over a month of the monsoon still to go, there is still time for the rains to recover. Indeed, it is worth noting that the gap between actual rainfall and what is considered normal has fallen since the end of July.

It should be noted that there are continuing reports of farmers clearing their fields to sell their cane as fodder. Although difficult to quantify at this stage, this development has the potential to substantially reduce cane availability by the time the crushing campaign begins and, therefore, poses a significant downside risk to our forecast.

With consumption estimated at 22.5-23.0 million tonnes, white value, 2011/12 has an exportable surplus of 3-4 million tonnes. The government has granted three tranches of OGL exports for the 2011/12 season. The first two tranches were restricted to a million tonnes each, and the government allocated export permits on a pro rata basis among all mills. A third set of exports has now been permitted and, importantly, does not require exporters to apply for a permit. The two million tonnes sanctioned under the first two tranches have been shipped. By the first week of August, an additional 1.4 million tonnes had been registered for export, of which 850,000 tonnes are reported to have already been shipped. Concerns over the monsoon have caused domestic prices to shoot up by over 15% since the start of July, making exports unattractive compared to domestic sales (Diagram 2.2). For this reason, we do not expect many more exports to be made above those already registered.

Diagram 2.2: Indian domestic prices vs. export price [1]



Note: 1. The export parity price excludes the cost of transferring export licenses.

In fact, India has begun to import raw sugar during the third quarter. Over 200,000 tonnes of VHP sugar is scheduled to leave Brazil for western India in August, and there are also reports

that some of China's washed out sugar is now destined for India. The VHP sugar is likely to be refined by stand-alone refineries located on the west coast and, although it could be re-exported duty-free under the grain-to-grain scheme, it is more likely to head to the domestic market considering the premium it is offering over exports.

Looking ahead to 2012/13, the government has said that it will not ban grain and sugar exports as it did after the poor monsoon of 2009, particularly as stocks are above target levels. Furthermore, our updated forecasts suggest that India will still have a potential exportable surplus of over a million tonnes next year.

Indonesia

The 2012/13 harvest is in full swing in Indonesia at the moment. Total white sugar production is reported to have reached 300,000 tonnes by early June and is expected to increase to one million tonnes in August. Official figures indicate the overall area under sugar cane cultivation will be largely unchanged in 2012/13 and, assuming average sugar yields, we anticipate that sugar production will reach 2.6 million tonnes, raw value (Table 2.3).

Table 2.3: Sugar balance projections: Indonesia ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		2,892	2,515	2,450	2,500	2,603
Consumption		5,492	5,521	5,656	5,652	5,787
Imports -	Total	2,498	2,807	3,344	3,302	3,185
	Raws	*1,950*	*2,264*	*2,800*	*2,815*	*2,935*
	Whites	*548*	*544*	*544*	*487*	*250*
Exports -	Total	0	0	0	0	0
	Raws	*0*	*0*	*0*	*0*	*0*
	Whites	*0*	*0*	*0*	*0*	*0*
Apparent Stock Change		(101)	(200)	138	150	0
Per Capita Consumption (kg)		23.3	23.2	23.5	23.3	23.5

Note: Crop year beginning Q2.

Despite the fact that Indonesia is in the middle of its crushing season, supplies of sugar in the domestic market are tight. This had partly been driven by the Ramadan festival, which encouraged commodity traders to buy and store more sugar for sale in July and August this year. In addition, the government's announcement in early May that it would not issue any further licences to import sugar has meant that domestic production has struggled to meet demand. In addition, imported sugar for industrial use leaked into the retail market, hurting sales of white sugar produced locally. As a result, the average retail sugar price reached a record-high of IDR12,758 per kg during June.

The domestic price pressure forced the Indonesian government to issue import permits for 17,500 tonnes of white sugar in early August. According to industry sources, Indonesia is preparing to award additional import permits for 250,000 tonnes of raw sugar, as there is currently a refined sugar shortage amongst the food and beverage industries.

Pakistan

With the 2011/12 harvest now having drawn to a close, final sugar production is estimated at around 4.7 million tonnes, white value (5.1 million tonnes, raw value), just below the record

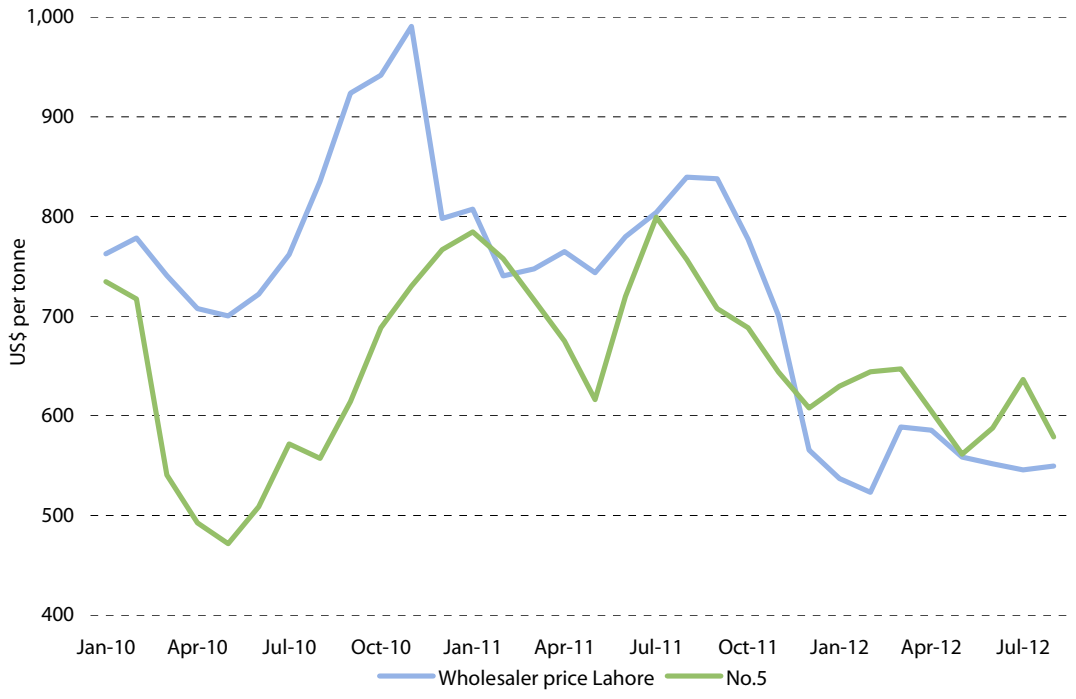
level of production achieved in the 2007/08 campaign. Given consumption of 4.3 million tonnes, this has resulted in surplus production of around 400-500,000 tonnes this year. When coupled with a considerable build up in stocks in 2010/11, official exports of 400,000 tonnes have been permitted by the government so far this year, the first time the country has made large-scale exports in five years. Indeed, the government has recently struck a deal to sell 30,000 tonnes of sugar to Tajikistan, an export route which had previously been banned since 2009. When unofficial exports via the border with Afghanistan are taken into account, our estimate of total exports in 2011/12 stands at around 0.5 million tonnes, white value (Table 2.4).

Table 2.4: Sugar balance projections: Pakistan ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		3,407	3,406	4,478	5,131	4,758
Consumption		4,131	4,565	4,457	4,652	4,848
Imports -	Total	243	794	713	10	90
	Raws	*0*	*0*	*0*	*0*	*0*
	Whites	*243*	*794*	*713*	*10*	*90*
Exports -	Total	2	0	0	544	0
	Raws	*0*	*0*	*0*	*0*	*0*
	Whites	*2*	*0*	*0*	*544*	*0*
Apparent Stock Change		(482)	(365)	734	(55)	(0)
Per Capita Consumption (kg)		24.3	26.4	25.3	26.0	26.6

Note: Crop year beginning Q4.

Diagram 2.3: Pakistan domestic price vs. the world white sugar price



Looking ahead to 2012/13, as in neighbouring India, the start of the monsoon this year was delayed by around ten days, and rainfall during July and August-to-date, particularly over the main producing state of Punjab, has remained some way below historical levels, thus causing concern over crop development and potential yields. The country will need sufficient rainfall over the next few months in order to promote soil moisture and cane growth ahead of the harvest later this year. Based on these weather concerns and a modest fall in cane area, we are currently forecasting a 7% drop in production to 4.4 million tonnes, white value, which if realised would make Pakistan broadly self sufficient in 2012/13.

Thailand

The 2011/12 Thai crop was completed on May 20th 2012, with 98.0 million tonnes of cane being crushed, producing over 10.1 million tonnes, tel quel, of sugar (10.8 million tonnes, raw value), higher than last year. At the same time, the Quota A allocation (which is destined to the domestic market) has been reduced to 2.3 million tonnes, white value, from 2.4 million tonnes the previous season. As a result, we can expect to see increased export availability in the region of 8.1 million tonnes for 2011/12. Of this, around 5.6 million tonnes is expected to be raw sugar (Table 2.5).

Looking ahead to 2012/13, the Thai sugarcane committee has recently announced its initial estimates for area planted to cane for the 2012/13 crop year at 1.47 million hectares. This is an increase of around 3% from 2011/12 levels. However, while industry sources are suggesting that 2012/13 will bring an increase in cane yields, we are projecting yields to decline. This is because last year, 60% of the cane crop was plant cane, and yields tend to be highest the first year before subsequently declining. Cane in Thailand is replanted every two years, and so in 2012/13, this implies that a much smaller proportion of the crop will be plant cane. Therefore the change in the demographics of the crop is likely to cause overall yields to decline, although much will depend on the weather over the coming months.

Table 2.5: Sugar balance projections: Thailand ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		7,564	7,246	10,140	10,840	10,050
Consumption		2,396	2,653	2,682	2,762	2,849
Imports -	Total	0	1	13	4	5
	Raws	*0*	*0*	*0*	*0*	*0*
	Whites	*0*	*1*	*13*	*4*	*5*
Exports -	Total	5,092	5,341	6,003	8,082	7,206
	Raws	*2,273*	*2,603*	*4,012*	*5,582*	*4,406*
	Whites	*2,819*	*2,738*	*1,990*	*2,500*	*2,800*
Apparent Stock Change		77	(747)	1,468	(0)	(0)
Per Capita Consumption (kg)		34.9	38.4	38.6	39.5	40.4

Note: Crop year beginning Q4.

Thailand's north and central cane growing regions have experienced drier-than-usual weather conditions during the past couple of months, with rainfall between 25%-75% lower than typical levels for this time of year. This has triggered fears of an El Niño effect as it becomes increasingly likely that the weather pattern will occur this year. Although sugar is a resilient crop, if more normal levels of rainfall do not resume shortly then the dry conditions may damage yields. Based on these assumptions, we are currently projecting that sugar production could reach 10.0 million tonnes, raw value, based on a sugar recovery rate of

10.4%. However we will be monitoring the weather conditions closely as this figure may be reduced if weather conditions remain unfavourable. Another potential cause for concern are possible incidences of white leaf disease in the northeast region.

Assuming that consumption will continue to grow to at a trend growth rate of just over 3% per year, we are projecting that consumption could increase to 2.9 million tonnes, raw value, which would allow for export availability in the region of 7.2 million tonnes, and raw sugar exports could reach 4.4 million tonnes.

Australia

Heavy rains have once again caused problems with the cane crush in Australia. Indeed, some parts of northern Australia have seen over 400% of the typical rainfall expected for July according to the Australian Bureau of Meteorology. Many mills were forced to halt production, and while all mills have now since re-opened, some are facing challenging harvesting conditions due to cane areas being very boggy, and the increased mud levels may cause delays and blockages with machinery. These problems with the crush means that it is now likely that harvesting will have to continue until December, risking running into the wet season which could potentially cause further hindrance to the crush. On a positive note, the cane still in the fields may benefit from the rainfall and continue growing, which may offer some small compensation to growers.

Due to the unfavourable weather conditions, we have revised downwards our projections for cane area harvested to below 370,000 hectares, which we now estimate could yield around 30.7 million tonnes of cane. However we will be closely monitoring the weather in Australia in the coming months, as, in order to achieve this level of production, the industry is reliant on the coming months bringing drier weather conditions if the crush is to proceed without further disruptions.

Table 2.6: Sugar balance projections: Australia ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		4,605	4,523	3,634	3,733	4,401
Consumption		1,056	1,142	1,160	1,178	1,194
Imports -	Total	40	59	79	39	45
	Raws	*25*	*48*	*50*	*25*	*30*
	Whites	*15*	*12*	*29*	*14*	*15*
Exports -	Total	3,276	3,403	2,575	2,594	3,252
	Raws	*3,085*	*3,187*	*2,330*	*2,434*	*3,039*
	Whites	*190*	*216*	*245*	*160*	*213*
Apparent Stock Change		313	38	(22)	0	0
Per Capita Consumption (kg)		48.9	51.9	51.9	51.9	51.8

Note: Crop year beginning Q2.

With consumption largely unchanged at 1.2 million tonnes, a crop of 4.4 million tonnes could enable exports of just under 3.3 million tonnes (Table 2.6); a downward revision from our last *Sugar Quarterly*. The heavy rainfall has caused some minor delays in transporting sugar to the export terminals. However, Queensland Sugar Ltd (QSL) has sufficient stocks to make up for any shortfall in the sugar crop and the poor weather conditions have caused minimal disruption to their export program.

Mexico

Mexico concluded its 2011/12 sugarcane harvest in the last week of June. Total cane milled was up 4.8% higher than the previous year, however, due to poor cane quality, sugar production was down 2.6% to 5.4 million tonnes, raw value. Nevertheless, this exceeded expectations set earlier in the 2011/12 crop year, when it was suggested that a drought in much of the country could reduce sugar production by more than 5%.

Of the sugar being produced in Mexico, a growing share is being produced as standard, or estandar (99.4% pol) at the expense of refinado (refined) production (99.85% pol). In 2010/11, for example, estandar comprised 62.5% of total Mexican production versus 33% for refinado with the balance being made up of other sugars. In 2011/12, however, estandar production grew in absolute terms, despite declines in total sugar production, and for the year estandar made up 65% of total sugar produced versus 31% for refinado. This reflects the fact that refinado has traditionally been used in beverage applications in Mexico, where it continues to lose ground against HFCS.

US and Mexican sources have been inconsistent in their data on Mexican HFCS imports for 2011/12. US data suggests that HFCS exports to Mexico are down 8% relative to last year as of June, while Mexico, for their part, reports that HFCS imports from the US are up 18% since 2010/11. Discussions with industry sources suggest that both sets of statistics are incorrect, and that exports to Mexico are up slightly relative to last year. Given the implications of HFCS consumption in Mexico on the NAFTA supply demand balances this will be an issue we monitor closely going forward.

Turning to the 2012/13 crop, the summer months represent a fairly slow period in the sugar news cycle in Mexico, where industry stakeholders look to reconcile cane acreage and monitor weather for the coming year's crop. So far, rainfall in the key cane growing regions of Mexico has been good and the prospect of an El Niño year suggests that this trend will continue. Based on this prospect, we are currently projecting production to increase 3% to 5% from 2011/12 levels to around 5.5 million tonnes, raw value, in 2012/13 (Table 2.7).

Table 2.7: Sugar balance projections: Mexico ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		5,260	5,115	5,494	5,446	5,545
Consumption -	Sugar	5,479	4,890	4,463	4,709	4,685
	HFCS	653	1,418	1,635	1,656	1,673
	% HFCS	*11*	*22*	*27*	*26*	*26*
Imports -	Total	159	861	312	405	544
	Raws	*0*	*0*	*0*	*0*	*0*
	Whites	*159*	*861*	*312*	*405*	*544*
Exports -	Total	1,378	751	1,558	1,043	1,270
	Raws	*538*	*233*	*484*	*324*	*394*
	Whites	*841*	*518*	*1,074*	*719*	*876*
Apparent Stock Change		(1,439)	335	(214)	99	134
Per Capita Consumption (kg)		49.1	43.2	39.0	40.6	39.9

Note: Crop year beginning Q4.

Diagram 2.4: Mexico domestic *estandar* and refined sugar prices

In other news, the Government of Mexico announced in July that it would be selling the last nine of the government owned mills out of the 27 expropriated from the private sector in 2001. Collectively these mills account for between 20-30% of Mexican production. The government has indicated that it would prefer the nine mills, which vary widely in terms of profitability, as a package.

United States

In August, the USDA revised its supply/demand balance for the 2010/11 crop due to reporting errors among US sugar refiners. Among the revised figures, deliveries were increased by 66,000 short tons while ending stocks held by refiners were decreased 94,000 tons. Together, these revisions had the combined effect of lowering the end of year stocks-to-use ratio from roughly 13% to below 12%.

Despite this reduction in beginning stock levels, the US is set to conclude the 2011/12 marketing year with the highest ending stocks-to-use ratio in at least five years. For the year, beet sugar production is now pegged at 4.3 million tonnes and US cane sugar production at 3.2 million tonnes. This represents the largest beet sugar production since 2006/07 and the largest cane sugar production since 2003/04. Although the USDA projected good beet and cane crops early on in 2011/12, the Department underestimated both domestic and Mexican production through late spring. Because the Department underestimated NAFTA production for the year, it opened up a TRQ increase of 385,000 tonnes in April. With this increase, TRQ sugar imports for the 2011/12 are estimated at 1.9 million tonnes, the highest level since hurricane Katrina in 2005/06. Collectively, strong domestic production and high import levels will help push the end-of-year stocks to use ratio close to 15%, a clear departure in how the US sugar market has been managed post-NAFTA.

For 2012/13, further increases in domestic production are expected. Building on a high level of beginning stocks, this is likely to push TRQ sugar imports much closer to minimum levels. The worst drought in 50 years, which has decimated US corn and soybean production, has

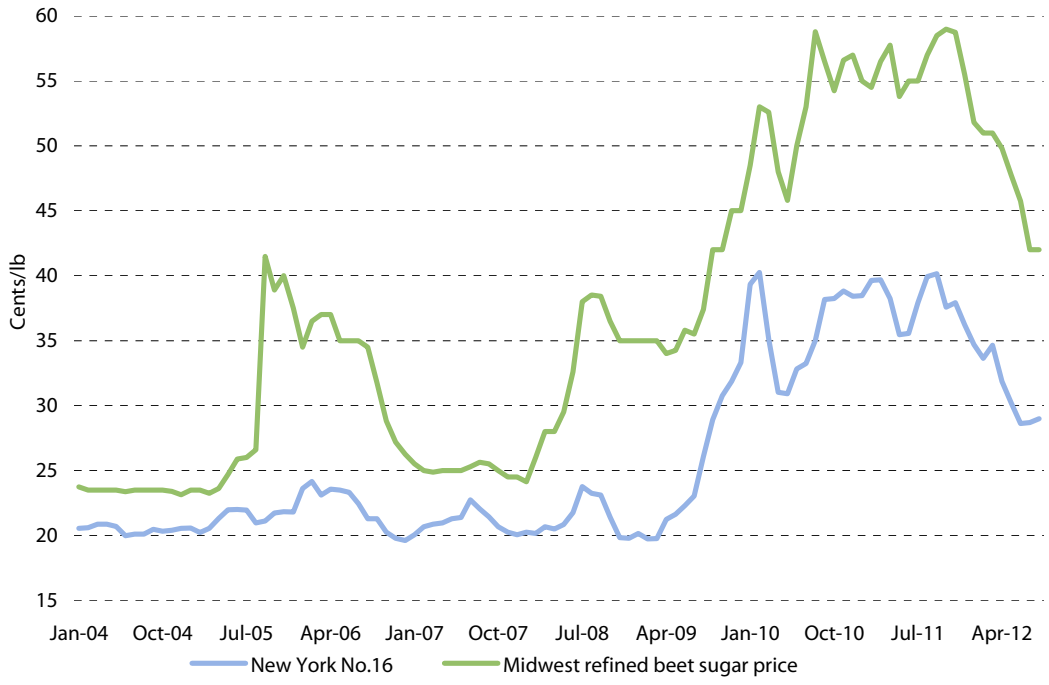
had a minimal impact on sugarbeets. In fact, in the Red River Valley, which accounts for half of all US sugarbeet production, 75% of beets were reported to be in good or excellent condition. With the early planting of the 2012/13 crop, and the minimal impact of the current drought, US beet sugar production is expected to reach 4.6 million tonnes, a record. The outlook for cane sugar production in the US is also improving, with 2012/13 production expected to reach 3.3 million tonnes. Meanwhile, the pace of sugar consumption growth in the US is decelerating and 2012/13 production in Mexico is expected to increase relative to last year. As a result, we expect the US will import at least 600,000 tonnes less sugar under the TRQ in the year ahead, relative to 2011/12 levels.

Table 2.8: Sugar balance projections: US ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		6,832	7,224	7,104	7,527	7,938
Consumption -	Sugar	9,623	10,117	10,362	10,428	10,533
	HFCS	7,987	7,787	7,597	7,642	7,766
	% HFCS	*45*	*43*	*42*	*42*	*42*
Imports -	Total	2,796	3,012	3,492	3,446	3,037
	Raws	*1,664*	*2,155*	*2,498*	*2,465*	*2,173*
	Whites	*1,132*	*857*	*994*	*981*	*864*
Exports -	Total	123	151	242	227	227
	Raws	*0*	*0*	*0*	*0*	*0*
	Whites	*123*	*151*	*242*	*227*	*227*
Apparent Stock Change		(118)	(33)	(8)	319	214
Per Capita Consumption (kg)		31.3	32.7	33.2	33.1	33.1

Note: Crop year beginning Q4.

Diagram 2.5: US domestic raw and refined sugar prices



Brazil

The questions that are being asked about the Centre/South cane crop have changed over the past few months. Until recently, the focus was on the size of the crop. Now, the critical questions are: *how much cane can the mills crush this season* and *how much sugar and ethanol will this cane yield*?

The reason for this change of focus lies with the very unusual pattern of rainfall this season. The crop suffered from very dry conditions during the summer months, which are critical for cane development. While the rains finally arrived, they only did so at the start of the crushing season, with above average rainfall in April, May and, in particular, June creating problems for the harvest. While dry weather finally arrived in July, with the industry achieving a record crush rate in the last two weeks of the month, two things have become apparent. First, the quality of cane has remained very low. Second, the harvest so far has been interrupted frequently and its progress remains well behind schedule. Even allowing for the good results in July, the harvest remains 17% behind where it was last year. In other words, it seems the average quality of cane over the course of the season will be very poor and mills will be unlikely to be able to crush all of the available cane. To make matters worse, an El Niño weather, which has been widely predicted by long-range weather forecasters, implies wetter-than-normal conditions during spring (August to October). If correct, this would lead to lower cane quality, greater interruption of the harvest and less cane being crushed before the end of the year.

Up until 16th August, the Centre/South industry crushed 261 million tonnes of cane. If crushing is to be completed by mid December (after which the onset of summer rains lowers ATR significantly) this means that the final amount of cane that can be crushed is likely to be crushed is around 480-510 million tonnes (we have taken a mid point of 493 million tonnes). However, ATR is expected to remain poor averaging around 130 kg/tonne of cane this year. With sugar continuing to offer better returns than ethanol, we expect mills to continue to push sugar output as hard as possible, with around 49% of ATR being used to produce sugar, higher than last year. This implies sugar production could reach just 29.9 million tonnes (32.3 million tonnes, raw value).

In the Northeast, sugar and ethanol output are expected to reach 5.0 million tonnes, raw value, and 2.2 billion litres, respectively from 64 million tonnes of cane. This takes total national production to 37.2 million tonnes, raw value, of sugar and 21.4 billion litres of ethanol.

Table 2.9: Sugar balance projections: Brazil ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		33,454	35,502	40,695	39,383	37,227
Consumption		12,007	12,704	12,945	13,190	13,439
Imports -	Total	0	0	0	0	0
	Raws	*0*	*0*	*0*	*0*	*0*
	Whites	*0*	*0*	*0*	*0*	*0*
Exports -	Total	21,955	25,438	28,632	26,175	23,788
	Raws	*17,241*	*20,755*	*23,738*	*22,285*	*20,960*
	Whites	*4,714*	*4,683*	*4,894*	*3,890*	*2,828*
Apparent Stock Change		(508)	(2,640)	(882)	17	0
Per Capita Consumption (kg)		62.5	65.6	66.3	66.9	67.4

Note: Crop year beginning Q2.

Table 2.10: Brazilian cane, sugar and ethanol production by region

	2012/13			2011/12		
	Centre/South	North/Northeast	**Total**	Centre/South	North/Northeast	**Total**
CANE						
Cane output (mn mt)	493.0	64.0	**557.0**	492.8	67.5	**560.3**
Sugar Yield (kg ATR/mt cane)	130.0	134.8	**130.6**	137.6	135.4	**137.3**
SUGAR (mn mt tq)						
Beginning Stocks	0.5	1.2	**1.8**	0.5	1.2	**1.8**
Production	29.9	4.6	**34.5**	31.3	5.3	**36.5**
Consumption	9.7	2.8	**12.5**	9.5	2.7	**12.2**
Transfer	-0.5	0.5	**0.0**	-0.5	0.5	**0.0**
Exports	19.7	2.4	**22.1**	21.3	3.0	**24.3**
Ending Stocks	0.5	1.2	**1.8**	0.5	1.2	**1.8**
ETHANOL (bn litres)						
Beginning Stocks	2.5	0.9	**3.4**	1.1	1.1	**2.2**
Production:	19.2	2.2	**21.4**	20.5	2.2	**22.7**
- Hydrous	11.3	1.0	**12.4**	12.7	1.0	**13.7**
- Anhydrous	7.8	1.2	**9.0**	7.8	1.2	**9.0**
Consumption:	17.8	2.0	**19.7**	18.5	2.1	**20.6**
- Hydrous	13.8	1.5	**15.3**	13.9	1.5	**15.4**
- Anhydrous	4.0	0.4	**4.4**	4.6	0.5	**5.1**
Transfer	0.0	0.0	**0.0**	0.0	0.0	**0.0**
Exports	2.2	0.3	**2.5**	1.7	0.3	**2.1**
Ending Stocks	1.8	0.8	**2.6**	1.4	0.9	**2.3**

Note: Negative ending stocks are an "accounting" phenomenon and arise because we assume the crop year runs from May 1 and ends on April 30. In reality, new crop supplies are generally available in April, replenishing stocks before the old season has finished.

Table 2.11: Brazilian sugar and ethanol production by region [1]

	Centre/ South	North/ Northeast	**Total Sugar Production**	Centre/ South	North/ Northeast	**Total Ethanol Production**
	('000 tonnes, raw value)			(million litres)		
2003/04	22,038	4,830	**26,868**	13,069	1,740	**14,809**
2004/05	23,835	4,863	**28,698**	13,588	1,687	**15,275**
2005/06	23,749	4,082	**27,831**	14,353	1,594	**15,947**
2006/07	27,815	4,392	**32,206**	16,006	1,713	**17,719**
2007/08	28,259	5,170	**33,429**	20,333	2,193	**22,527**
2008/09	28,848	4,606	**33,454**	25,102	2,411	**27,513**
2009/10	30,831	4,671	**35,502**	23,329	2,005	**25,334**
2010/11	35,920	4,776	**40,695**	25,344	2,300	**27,644**
2011/12	33,755	5,628	**39,383**	20,625	2,150	**22,775**
2012/13 [2]	32,271	4,956	**37,227**	19,775	2,230	**22,005**

Notes: 1. Crop year beginning Q2.
2. Forecasts.

Diagram 2.6: Ex-mill returns from domestic sugar, bulk exports and hydrous ethanol in Centre/South Brazil

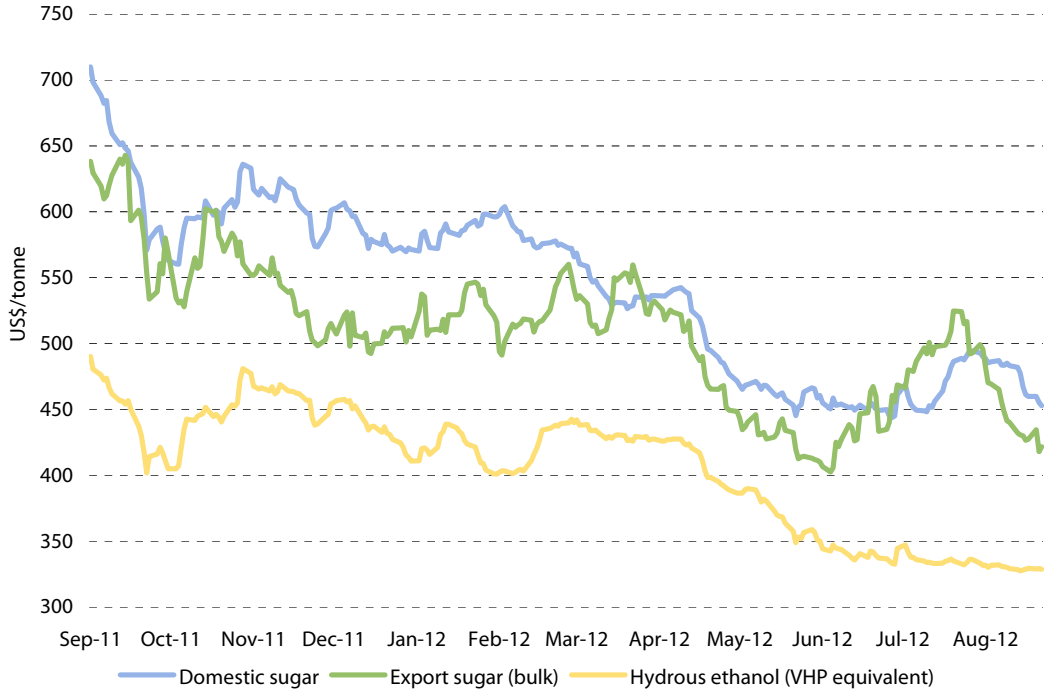
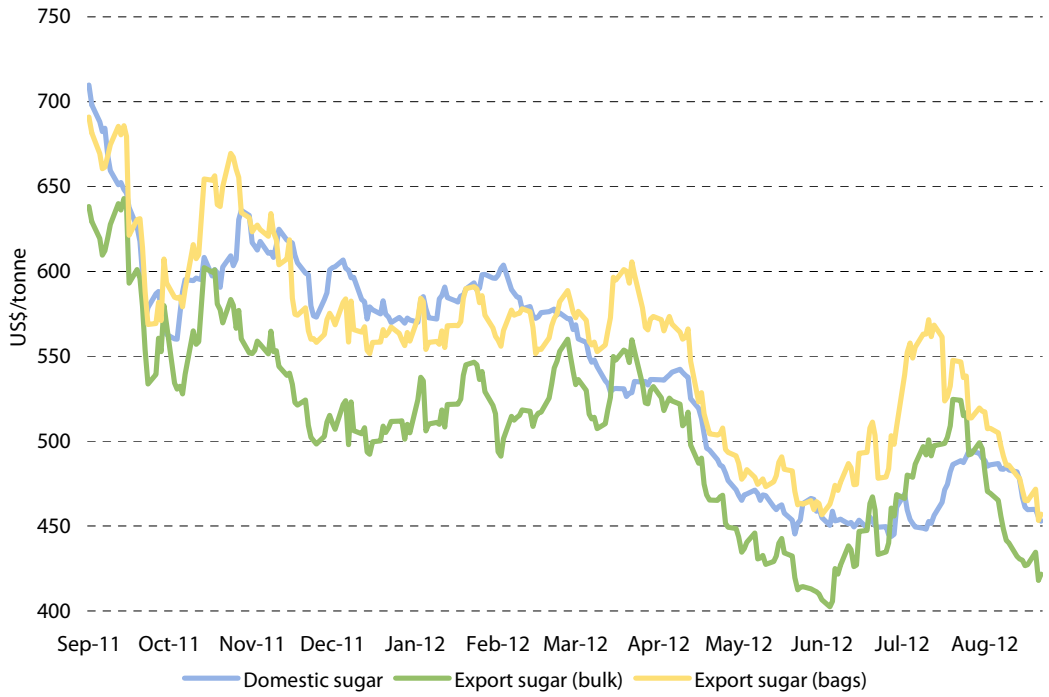


Diagram 2.7: Ex-mill returns from domestic sugar, bulk exports and bagged exports in Centre/South Brazil



European Union

With the 2012/13 EU beet processors due to begin their slicing campaigns over the next 1-2 months, there is a mixed outlook for beet production this year. Beet tests are just starting to be released, and early indications are that the impressive yields achieved in 2011/12 will not be repeated. Variable weather conditions during the summer months, particularly in northern and Western Europe, have not been ideal for beet development so far this year. Higher-than-average rainfall between March and July across the northern beet belt is likely to have heightened the spread of pests and diseases, while lack of sunshine and cooler temperatures has not been conducive for sucrose formation in the beets. In contrast, the weather in central and southern countries in the EU has been more beneficial for beet development. Sugar yields in the northwest are at this early stage expected to remain close to the five year average, considerably below the record yields achieved in 2011/12.

As a result, we have reduced our production forecast slightly since the previous *Sugar Quarterly* to 17.2 million tonnes, white value (including the theoretical sugar production for ethanol) [Table 2.13]. What seems certain is that processors will delay the start of the harvest to allow the beets as much time as possible to develop further.

Given the exceptional measures that the EU Commission has implemented so far this year to increase sugar supplies in the bloc, including the reclassification of 650,000 tonnes of over-quota sugar for sale on the domestic market and a number of import tenders which resulted in a further 400,000 tonnes of imports being permitted, the overall balance sheet in the EU is beginning to look healthier. Stocks at the end of 2011/12 are now projected at around 2.4 million tonnes, white value (Table 2.13), far higher than the critical levels at the start of 2010/11 season. Perhaps in light of this, EU sugar prices have fallen for the first time since June 2010, with the average EU sugar price as reported by the EU Commission falling to €711 per tonne in May 2012 (Diagram 2.8). Nevertheless, prices remain elevated by historical standards.

Table 2.12: Sugar balance projections: European Union ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		15,634	17,579	15,430	18,485	17,070
Consumption		18,468	18,696	18,626	18,902	19,011
Imports -	Total	3,304	3,262	4,338	4,044	3,909
	Raws	*2,654*	*2,666*	*3,165*	*3,117*	*3,101*
	Whites	*650*	*597*	*1,173*	*926*	*808*
Exports -	Total	1,067	3,164	1,457	2,565	1,814
	Raws	*0*	*0*	*0*	*0*	*0*
	Whites	*1,067*	*3,164*	*1,457*	*2,565*	*1,814*
Apparent Stock Change		(598)	(1,019)	(316)	1,061	155
Reported White Sugar Price (Euros/tonne)		575	500	484	484	484
Per Capita Consumption (kg)		36.0	36.3	36.0	36.4	36.5

Notes: 1. Crop year beginning Q4.
2. Data is for EU-27 across entire period shown.

Table 2.13: European Union quota and over-quota sugar balance ('000 tonnes, white value)

	2009/10	2010/11	2011/12	2012/13
Quota Balance				
Opening Stock	1,599	938	1,780	2,494
Carry In	413	564	150	430
Quota Production	13,314	13,791	13,937	13,288
Total Production	17,372	15,195	18,416	17,206
Total Imports	2,821	3,836	3,606	3,489
EPA-EBA	*1,493*	*1,724*	*1,793*	*1,958*
'Exceptional' Quota	*0*	*837*	*529*	*0*
Quota Consumption	15,925	15,925	16,025	16,125
Net Processed Products			(610)	(610)
	(521)	(610)		
Implied Closing Stock	938	1,780	2,494	2,490
Balance	***(661)***	***842***	***713***	***(153)***
Over-Quota Balance				
Over-Quota Production	4,471	1,969	4,628	4,348
Over-Quota Consumption	1,954	1,600	2,054	2,154
- Ethanol	*1,200*	*1,000*	*1,300*	*1,400*
- Industrials	*754*	*600*	*754*	*754*
Over-Quota Exports	2,388	991	2,065	1,374
Carry Out	564	150	93	0
Balance	***(428)***	***(718)***	***430***	***828***

Diagram 2.8: EU vs. world sugar prices

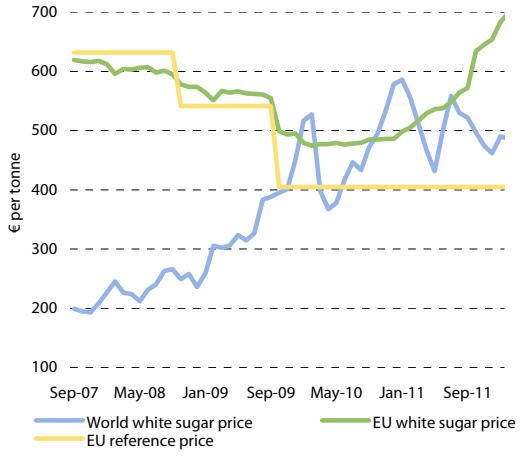


Diagram 2.9: Evolution of EPA-EBA imports into the EU

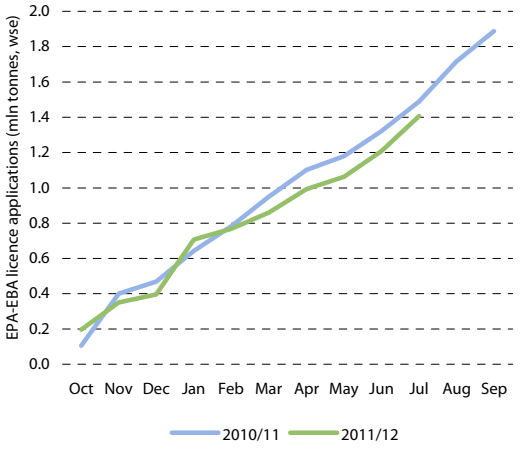


Table 2.14: European Union beet sugar production ('000 tonnes, white value)

	2008/09	2009/10	2010/11	2011/12 [1]	2012/13 [1]
Austria	411	381	444	*532*	*491*
Belgium	725	838	626	*787*	*675*
Bulgaria					
Czech Republic	415	432	373	*443*	*405*
Denmark	397	445	374	*472*	*428*
Estonia					
Finland	69	88	80	*86*	*82*
France [2]	3,244	3,576	3,737	*4,111*	*3,923*
Germany	3,236	3,784	3,153	*4,402*	*3,850*
Greece	100	172	77	*38*	*39*
Hungary	66	108	111	*124*	*110*
Ireland					
Italy	498	509	555	*450*	*472*
Latvia					
Lithuania	43	77	72	*105*	*123*
Netherlands	861	992	871	*999*	*912*
Poland	1,350	1,646	1,433	*1,711*	*1,577*
Portugal	1				
Romania	105	146	124	*138*	*127*
Slovakia	102	135	140	*182*	*159*
Slovenia					
Spain	608	550	528	*536*	*553*
Sweden	327	403	315	*390*	*371*
United Kingdom	1,192	1,188	925	*1,190*	*1,091*
Total EU	**13,749**	**15,470**	**13,937**	***16,695***	***15,385***

Notes: 1. Estimates.
2. Excludes DOMs.

Russia

The 2011/12 Russian beet slicing campaign continued until the end of February, considerably longer than in the previous years. Record plantings and beet yields resulted in a huge beet crop. However, inadequate storage capacity meant that up to 10 million tonnes of beet were lost, either as a result of not being harvested in time, or as post-harvest losses when stored in piles. Nevertheless, final sugar output was 5.0 million tonnes, white value (5.5 million tonnes, raw value), an 84% increase from last year's crop, which was decimated by drought (Table 2.15).

The focus of our attention is now on the 2012/13 crop, with the harvest now underway in the southern region of Krasnodar. As of 3rd August, 10 factories had already begun slicing beets. Although total area in the country has fallen to 1.1 million hectares, a 13% drop from last year, prospects for sugar yields are very encouraging. The Russian Sugar Producers' Union's latest beet test, carried out on 21th August, showed root weight was very close to what was recorded at the same time last year. Based on the historical relationship between root yields at this point of the season and actual beet yields realised, Russia is likely to once again see high beet yields.

Therefore, despite the fall in area, we estimate that beet production will be in excess of the 40 million tonnes that were successfully processed in 2011/12. In fact, considering that there have been investments in capacity and improvements in storage techniques, we expect that a greater quantity of beets will be processed this year and we are tentatively forecasting a modest increase in sugar production, which we expect will fall in the range of 5.0-5.5 million

tonnes, white value (5.4-6.0 million tonnes, raw value) in 2012/13. Considering that last year farmers were unlucky with the weather (an early frost in November followed by milder conditions in December/January resulted in heavy beet losses), if the weather is more hospitable this time round, there is potential for sugar output to fall in the upper end of this range.

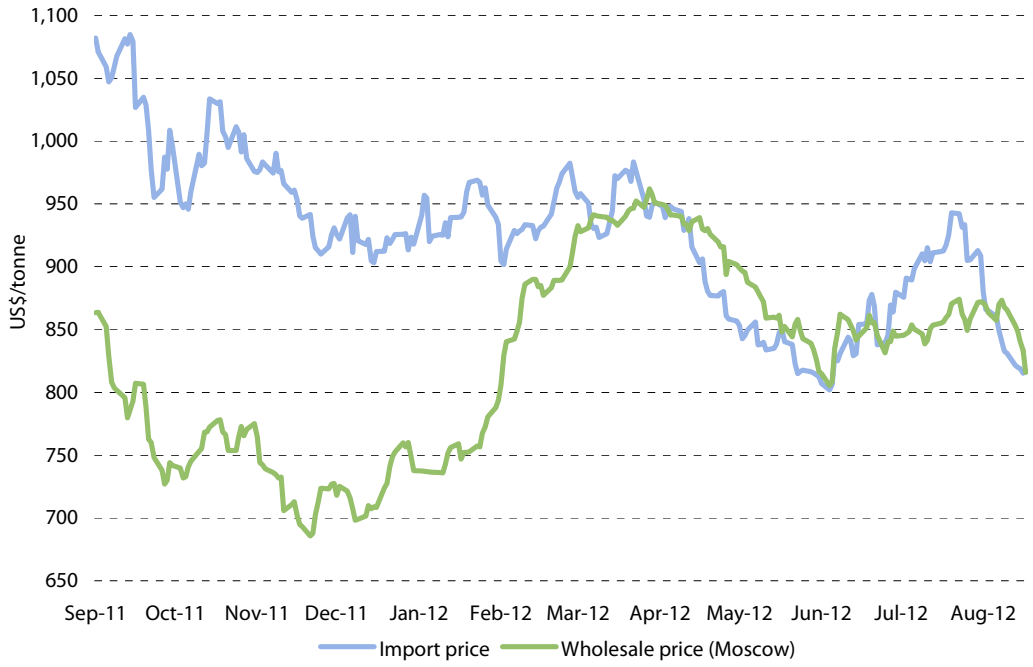
With domestic consumption estimated at around 5.4-5.5 million tonnes, white value, Russian import demand has contracted significantly this year. Once we account for some white sugar that comes in from Belarus and exports to neighbouring countries, this leaves raw import demand of under 650,000 tonnes, raw value, compared to a huge 2.8 million tonnes in 2010/11. By the end of June, we estimate that around 450,000 tonnes of this had been imported. This has meant that the refining campaign has been quiet this year, with only 11 refineries in operation compared to 28 last year. Indeed, the bumper beet crop has allowed Russia to expand exports. Russia is reported to have exported 300,000 tonnes of its white sugar. Most of these exports have gone to countries in Central Asia, particularly Kazakhstan.

Table 2.15: Sugar balance projections: Russia ('000 tonnes, raw value)

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		3,864	3,531	2,966	5,462	5,658
Consumption		5,874	5,685	5,848	5,849	5,850
Imports -	Total	2,360	3,005	3,245	914	518
	Raws	*2,054*	*2,667*	*2,790*	*697*	*454*
	Whites	*306*	*338*	*455*	*217*	*64*
Exports -	Total	137	77	163	326	326
	Raws	*0*	*0*	*0*	*0*	*0*
	Whites	*137*	*77*	*163*	*326*	*326*
Apparent Stock Change		213	774	200	200	(0)
Per Capita Consumption (kg)		41.1	39.8	40.9	41.0	41.0

Note: Crop year beginning Q3.

Diagram 2.10: Import price of sugar and the domestic price in Russia



South Africa

With crushing underway, it seems clear that South Africa will produce a much larger crop this year than in 2011/12 with more typical weather conditions and improved yields supporting the size of the crop. The South African Sugar Association has recently revised their cane production projections slightly downwards to 18.7 million tonnes, from 18.9 million tonnes the previous month. However, this should allow for 2.3 million tonnes, raw value, of production, a significant increase from last year's drought-affected crop (Table 2.16).

If production reaches just above 2.3 million tonnes, raw value, this would leave export availability of approximately 0.5 million tonnes available (after allowing for around 170,000 tonnes of imports from Brazil). With the industry looking to maximise white sugar exports and make use of its refining capacity, we expect just under half of this figure to be exported as white sugar. This would leave approximately 350,000 tonnes to be exported as raws.

Table 2.16: Sugar balance projections: South Africa ('000 tonnes, raw value)[1]

		2008/09	2009/10	2010/11	2011/12	2012/13
Production		2,451	2,361	2,079	1,985	2,346
Consumption		1,680	1,833	1,842	1,879	1,916
Imports -	Total	128	204	171	206	170
	Raws	*1*	*42*	*53*	*86*	*40*
	Whites	*127*	*162*	*118*	*119*	*130*
Exports -	Total	879	781	417	250	600
	Raws	*604*	*552*	*203*	*114*	*324*
	Whites	*276*	*229*	*214*	*136*	*276*
Apparent Stock Change		21	(50)	(9)	62	(0)
Per Capita Consumption (kg)		34.0	36.8	36.7	37.1	37.5

Notes:
1. Consumption excludes sales made by Swaziland into the South African Customs Union (SACU), which are treated as domestic consumption for the purpose of our global supply/demand balance.
2. Crop year beginning Q2.

Production, consumption and trade statistics by country

In the pages that follow, we present a series of tables of production, consumption and trade (distinguishing between raw and white sugar) for 46 of the most significant participants in the world sugar market. Each table contains data for the last five years, up to and including our forecasts for the 2012/13 crop year. All of the statistics are presented on a national crop year basis. In addition, we present two tables that contain each industry's supply/demand balance for their 2011/12 and 2012/13 national crop years. These tables also show the stock change in each industry. Finally, we present our estimates of global supply/demand balances on an international crop year basis, a calendar year basis and on a quarterly basis.

Table 2.17: Sugar production (national crop year) ('000 tonnes, raw value)

Country	2008/09	2009/10	2010/11	2011/12	2012/13
EU	15,634	17,579	15,430	18,485	17,070
Turkey	2,347	2,754	2,241	2,454	2,387
Belarus	563	528	473	648	568
Russia	3,864	3,531	2,966	5,462	5,658
Ukraine	1,371	1,613	1,956	2,528	2,276
Other	1,014	1,083	1,178	1,245	1,231
Europe	**24,794**	**27,087**	**24,243**	**30,822**	**29,189**
Canada	70	73	93	130	138
Cuba	1,380	1,190	1,200	1,400	1,450
Guatemala	2,333	2,510	2,202	2,678	2,492
Mexico	5,260	5,115	5,494	5,446	5,545
USA	6,832	7,224	7,104	7,527	7,938
Other	2,759	2,821	2,873	3,138	3,198
Central & North America	**18,634**	**18,933**	**18,967**	**20,319**	**20,760**
Argentina	2,448	2,256	2,038	2,094	2,046
Brazil	33,454	35,502	40,695	39,383	37,227
Chile	280	220	358	326	340
Colombia	2,036	2,598	2,078	2,340	2,306
Peru	1,021	1,065	1,038	1,076	1,103
Venezuela	662	579	557	535	557
Other	1,208	1,244	1,169	1,403	1,434
South America	**41,108**	**43,464**	**47,933**	**47,158**	**45,012**
China	13,513	11,771	11,361	12,446	13,507
India	15,290	20,392	26,303	28,143	26,094
Indonesia	2,892	2,515	2,450	2,500	2,603
Iran	866	951	1,220	1,248	1,160
Iraq	0	0	0	0	0
Japan	936	855	680	790	838
Kazakhstan	26	18	13	14	15
South Korea	0	0	0	0	0
Malaysia	31	26	25	25	26
Pakistan	3,407	3,406	4,478	5,131	4,758
Persian Gulf	0	0	0	0	0
The Philippines	2,056	2,006	2,499	2,243	2,200
Saudi Arabia	0	0	0	0	0
Singapore	0	0	0	0	0
Sri Lanka	54	40	35	40	42
Syria	101	137	174	200	208
Thailand	7,564	7,246	10,140	10,840	10,050
Uzbekistan	0	0	0	0	0
Yemen	0	0	0	0	0
Other	1,623	1,510	1,811	2,131	2,164
Asia	**48,359**	**50,875**	**61,189**	**65,752**	**63,664**
Algeria	0	0	0	0	0
Egypt	1,706	1,795	1,871	1,925	1,800
Mauritius	480	498	444	468	439
Morocco	404	409	444	489	491
Nigeria	21	38	30	45	50
South Africa	2,451	2,361	2,079	1,985	2,346
Swaziland	664	630	612	695	738
Zimbabwe	296	258	333	399	495
Other	3,750	3,667	4,198	4,351	4,765
Africa	**9,771**	**9,656**	**10,010**	**10,357**	**11,124**
Australia	4,605	4,523	3,634	3,733	4,401
Fiji	217	168	150	186	173
New Zealand	0	0	0	0	0
Other	38	38	42	39	38
Oceania	**4,859**	**4,728**	**3,826**	**3,958**	**4,612**
World Total	**147,525**	**154,743**	**166,169**	**178,366**	**174,362**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years. For this reason, they do not equal the totals in Table 1.1.

Table 2.18: Sugar consumption (national crop year) ('000 tonnes, raw value)

Country	2008/09	2009/10	2010/11	2011/12	2012/13
EU	18,468	18,696	18,626	18,902	19,011
Turkey	2,186	2,454	2,491	2,526	2,560
Belarus	417	439	518	520	522
Russia	5,874	5,685	5,848	5,849	5,850
Ukraine	1,660	1,926	1,923	1,919	1,916
Other	1,826	1,842	1,830	1,850	1,869
Europe	**30,431**	**31,043**	**31,235**	**31,566**	**31,727**
Canada	1,277	1,353	1,366	1,391	1,417
Cuba	667	646	651	656	661
Guatemala	681	705	740	762	784
Mexico	5,479	4,890	4,463	4,709	4,685
USA	9,623	10,117	10,362	10,428	10,533
Other	1,969	2,026	2,002	2,035	2,069
Central & North America	**19,697**	**19,737**	**19,584**	**19,981**	**20,150**
Argentina	1,690	1,814	1,819	1,824	1,828
Brazil	12,007	12,704	12,945	13,190	13,439
Chile	733	767	783	800	817
Colombia	1,715	1,651	1,623	1,594	1,607
Peru	1,116	1,176	1,191	1,207	1,224
Venezuela	1,149	1,110	1,128	1,150	1,173
Other	1,129	1,167	1,184	1,207	1,232
South America	**19,539**	**20,389**	**20,674**	**20,973**	**21,318**
China	14,829	14,887	14,675	14,892	15,218
India	24,784	25,327	24,240	24,784	25,279
Indonesia	5,492	5,521	5,656	5,652	5,787
Iran	2,328	2,374	2,450	2,504	2,558
Iraq	835	751	786	823	862
Japan	2,263	2,340	2,278	2,237	2,222
Kazakhstan	470	503	510	517	523
South Korea	1,265	1,275	1,269	1,274	1,278
Malaysia	1,318	1,378	1,411	1,443	1,475
Pakistan	4,131	4,565	4,457	4,652	4,848
Persian Gulf	307	314	328	341	353
The Philippines	2,091	2,229	1,821	2,100	2,135
Saudi Arabia	895	919	945	971	996
Singapore	265	302	311	319	324
Sri Lanka	774	701	717	734	750
Syria	966	875	895	916	936
Thailand	2,396	2,653	2,682	2,762	2,849
Uzbekistan	519	524	535	546	558
Yemen	551	563	584	607	631
Other	6,283	5,928	6,209	6,396	6,589
Asia	**72,760**	**73,928**	**72,760**	**74,469**	**76,173**
Algeria	1,280	1,300	1,327	1,360	1,390
Egypt	2,840	2,782	2,877	2,973	3,069
Mauritius	42	39	41	41	41
Morocco	1,144	1,159	1,179	1,198	1,218
Nigeria	1,603	1,230	1,183	1,229	1,276
South Africa	1,680	1,833	1,842	1,879	1,916
Swaziland	255	255	259	263	266
Zimbabwe	162	213	215	218	223
Other	6,996	7,467	7,781	8,073	8,400
Africa	**16,001**	**16,280**	**16,702**	**17,232**	**17,799**
Australia	1,056	1,142	1,160	1,178	1,194
Fiji	49	43	41	41	42
New Zealand	213	224	227	229	232
Other	68	70	71	73	74
Oceania	**1,387**	**1,478**	**1,499**	**1,521**	**1,542**
World Total	**159,815**	**162,855**	**162,454**	**165,743**	**168,709**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years. For this reason, they do not equal the totals in Table 1.1.

Table 2.19: Total sugar exports (national crop year) ('000 tonnes, raw value)

Country	2008/09	2009/10	2010/11	2011/12	2012/13
EU	1,067	3,164	1,457	2,565	1,814
Turkey	4	68	73	82	50
Belarus	285	519	419	332	356
Russia	137	77	163	326	326
Ukraine	37	1	1	163	180
Other	779	636	794	773	730
Europe	**2,308**	**4,464**	**2,908**	**4,241**	**3,457**
Canada	59	85	53	63	67
Cuba	784	596	627	778	826
Guatemala	1,576	1,922	1,445	1,916	1,708
Mexico	1,378	751	1,558	1,043	1,270
USA	123	151	242	227	227
Other	1,105	1,342	1,268	1,630	1,647
Central & North America	**5,026**	**4,847**	**5,193**	**5,657**	**5,745**
Argentina	479	791	219	180	228
Brazil	21,955	25,438	28,632	26,175	23,788
Chile	0	0	0	0	0
Colombia	478	1,054	694	942	885
Peru	97	95	75	76	78
Venezuela	0	0	0	0	0
Other	523	455	362	377	419
South America	**23,532**	**27,833**	**29,982**	**27,751**	**25,398**
China	72	94	82	65	74
India	183	150	2,850	3,411	1,352
Indonesia	0	0	0	0	0
Iran	0	2	45	60	52
Iraq	0	0	0	0	0
Japan	2	1	3	3	2
Kazakhstan	9	14	29	18	17
South Korea	309	376	398	359	353
Malaysia	134	233	321	275	239
Pakistan	2	0	0	544	0
Persian Gulf	1,525	1,500	1,305	1,343	1,408
The Philippines	218	173	317	600	146
Saudi Arabia	412	534	325	441	419
Singapore	119	169	181	103	91
Sri Lanka	0	0	0	0	0
Syria	76	284	212	248	194
Thailand	5,092	5,341	6,003	8,082	7,206
Uzbekistan	0	0	0	0	0
Yemen	110	92	114	128	103
Other	489	382	480	754	504
Asia	**8,751**	**9,347**	**12,664**	**16,433**	**12,161**
Algeria	0	0	221	521	674
Egypt	37	114	105	105	105
Mauritius	479	294	540	404	437
Morocco	0	0	0	0	0
Nigeria	0	0	0	0	0
South Africa	879	781	417	250	600
Swaziland	403	370	354	432	472
Zimbabwe	121	121	208	220	309
Other	1,037	1,006	1,164	1,188	1,338
Africa	**2,956**	**2,687**	**3,008**	**3,120**	**3,934**
Australia	3,276	3,403	2,575	2,594	3,252
Fiji	244	160	140	155	141
New Zealand	20	17	25	21	23
Other	0	0	5	1	1
Oceania	**3,539**	**3,580**	**2,744**	**2,771**	**3,417**
World Total	**46,113**	**52,757**	**56,499**	**59,973**	**54,112**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years.

Table 2.20: Raw sugar exports (national crop year) ('000 tonnes, raw value)

Country	2008/09	2009/10	2010/11	2011/12	2012/13
EU	0	0	0	0	0
Turkey	0	0	0	0	0
Belarus	0	0	0	1	0
Russia	0	0	0	0	0
Ukraine	0	0	0	0	0
Other	1	0	0	0	0
Europe	**1**	**0**	**0**	**1**	**0**
Canada	0	1	1	1	1
Cuba	784	596	627	778	826
Guatemala	943	1,094	990	1,173	1,053
Mexico	538	233	484	324	394
USA	0	0	0	0	0
Other	1,015	1,217	1,109	1,488	1,486
Central & North America	**3,280**	**3,141**	**3,211**	**3,764**	**3,760**
Argentina	245	417	108	94	113
Brazil	17,241	20,755	23,738	22,285	20,960
Chile	0	0	0	0	0
Colombia	119	308	101	241	213
Peru	85	81	65	69	70
Venezuela	0	0	0	0	0
Other	273	253	240	267	269
South America	**17,964**	**21,814**	**24,252**	**22,957**	**21,626**
China	6	4	5	5	5
India	72	0	0	1,000	0
Indonesia	0	0	0	0	0
Iran	0	0	0	8	7
Iraq	0	0	0	0	0
Japan	0	0	2	2	1
Kazakhstan	0	0	0	0	0
South Korea	0	0	0	0	0
Malaysia	1	0	0	0	0
Pakistan	0	0	0	0	0
Persian Gulf	0	0	0	0	0
The Philippines	218	173	317	595	146
Saudi Arabia	0	0	0	0	0
Singapore	2	7	5	2	2
Sri Lanka	0	0	0	0	0
Syria	0	0	1	0	0
Thailand	2,273	2,603	4,012	5,582	4,406
Uzbekistan	0	0	0	0	0
Yemen	0	0	0	0	0
Other	33	49	80	103	137
Asia	**2,605**	**2,836**	**4,421**	**7,297**	**4,704**
Algeria	0	0	0	0	0
Egypt	0	0	0	0	0
Mauritius	474	269	259	122	118
Morocco	0	0	0	0	0
Nigeria	0	0	0	0	0
South Africa	604	552	203	114	324
Swaziland	367	325	304	373	404
Zimbabwe	104	121	164	178	257
Other	376	472	499	548	656
Africa	**1,925**	**1,740**	**1,430**	**1,335**	**1,759**
Australia	3,085	3,187	2,330	2,434	3,039
Fiji	244	160	140	155	141
New Zealand	0	0	1	0	1
Other	0	0	4	1	0
Oceania	**3,329**	**3,346**	**2,475**	**2,590**	**3,181**
World Total	**29,104**	**32,878**	**35,789**	**37,944**	**35,030**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years.

Table 2.21: White sugar exports (national crop year) ('000 tonnes, raw value)

Country	2008/09	2009/10	2010/11	2011/12	2012/13
EU	1,067	3,164	1,457	2,565	1,814
Turkey	4	68	73	82	50
Belarus	285	519	419	331	356
Russia	137	77	163	326	326
Ukraine	37	1	1	163	180
Other	778	635	794	773	730
Europe	**2,308**	**4,464**	**2,908**	**4,240**	**3,457**
Canada	59	84	52	62	66
Cuba	0	0	0	0	0
Guatemala	634	828	454	743	655
Mexico	841	518	1,074	719	876
USA	123	151	242	227	227
Other	90	125	159	142	161
Central & North America	**1,746**	**1,706**	**1,982**	**1,893**	**1,984**
Argentina	234	374	111	86	115
Brazil	4,714	4,683	4,894	3,890	2,828
Chile	0	0	0	0	0
Colombia	359	746	594	701	672
Peru	12	14	10	7	8
Venezuela	0	0	0	0	0
Other	249	202	122	110	150
South America	**5,568**	**6,019**	**5,730**	**4,794**	**3,773**
China	66	90	77	60	69
India	112	150	2,850	2,411	1,352
Indonesia	0	0	0	0	0
Iran	0	2	45	52	45
Iraq	0	0	0	0	0
Japan	1	1	1	1	1
Kazakhstan	9	14	29	18	17
South Korea	309	376	398	359	353
Malaysia	133	233	321	275	239
Pakistan	2	0	0	544	0
Persian Gulf	1,525	1,500	1,305	1,343	1,408
The Philippines	0	0	0	5	0
Saudi Arabia	412	534	325	441	419
Singapore	118	163	177	101	89
Sri Lanka	0	0	0	0	0
Syria	76	284	211	248	194
Thailand	2,819	2,738	1,990	2,500	2,800
Uzbekistan	0	0	0	0	0
Yemen	110	92	114	128	103
Other	456	333	400	651	368
Asia	**6,146**	**6,511**	**8,242**	**9,136**	**7,457**
Algeria	0	0	221	521	674
Egypt	37	114	105	105	105
Mauritius	5	25	280	282	319
Morocco	0	0	0	0	0
Nigeria	0	0	0	0	0
South Africa	276	229	214	136	276
Swaziland	36	44	50	59	68
Zimbabwe	16	0	44	42	52
Other	661	534	664	640	681
Africa	**1,031**	**946**	**1,578**	**1,785**	**2,175**
Australia	190	216	245	160	213
Fiji	0	0	0	0	0
New Zealand	20	17	24	21	22
Other	0	0	1	0	1
Oceania	**210**	**233**	**270**	**181**	**236**
World Total	**17,009**	**19,880**	**20,710**	**22,029**	**19,082**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years.

Table 2.22: Total sugar imports (national crop year) ('000 tonnes, raw value)

Country	2008/09	2009/10	2010/11	2011/12	2012/13
EU	3,304	3,262	4,338	4,044	3,909
Turkey	5	4	5	5	5
Belarus	186	400	473	204	310
Russia	2,360	3,005	3,245	914	518
Ukraine	73	352	54	0	0
Other	1,243	1,177	1,407	1,551	1,402
Europe	**7,170**	**8,200**	**9,521**	**6,718**	**6,144**
Canada	1,203	1,244	1,228	1,324	1,346
Cuba	24	0	78	34	37
Guatemala	0	0	0	0	0
Mexico	159	861	312	405	544
USA	2,796	3,012	3,492	3,446	3,037
Other	423	539	500	528	519
Central & North America	**4,606**	**5,656**	**5,611**	**5,737**	**5,483**
Argentina	24	0	62	10	10
Brazil	0	0	0	0	0
Chile	634	589	600	384	477
Colombia	165	138	184	188	186
Peru	178	150	263	207	199
Venezuela	634	572	714	615	616
Other	370	235	317	313	282
South America	**2,005**	**1,685**	**2,140**	**1,716**	**1,770**
China	1,099	1,571	2,301	4,275	1,785
India	3,652	3,996	50	537	537
Indonesia	2,498	2,807	3,344	3,302	3,185
Iran	1,334	1,825	1,458	1,316	1,450
Iraq	822	753	793	826	862
Japan	1,346	1,341	1,571	1,450	1,386
Kazakhstan	393	407	576	521	526
South Korea	1,745	1,680	1,770	1,633	1,631
Malaysia	1,408	1,722	1,807	1,693	1,688
Pakistan	243	794	713	10	90
Persian Gulf	1,908	2,015	1,685	1,840	1,810
The Philippines	9	263	400	50	81
Saudi Arabia	1,204	1,402	1,326	1,412	1,416
Singapore	382	434	423	422	415
Sri Lanka	858	561	807	694	708
Syria	853	1,270	774	964	922
Thailand	0	1	13	4	5
Uzbekistan	511	539	535	546	558
Yemen	634	685	711	737	734
Other	4,760	4,745	5,200	5,363	4,900
Asia	**25,658**	**28,811**	**26,256**	**27,594**	**24,690**
Algeria	924	1,476	1,566	1,756	2,206
Egypt	1,312	867	1,264	1,692	1,374
Mauritius	44	31	40	39	39
Morocco	775	675	948	892	777
Nigeria	1,650	1,207	1,082	1,201	1,226
South Africa	128	204	171	206	170
Swaziland	0	0	1	0	0
Zimbabwe	6	53	84	39	36
Other	4,432	4,895	5,000	5,048	4,953
Africa	**9,272**	**9,408**	**10,156**	**10,872**	**10,782**
Australia	40	59	79	39	45
Fiji	7	5	18	10	10
New Zealand	240	223	251	250	255
Other	34	29	35	33	32
Oceania	**320**	**316**	**383**	**332**	**342**
World Total	**49,032**	**54,077**	**54,068**	**52,971**	**49,210**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years.

Table 2.23: Raw sugar imports (national crop year) ('000 tonnes, raw value)

Country	2008/09	2009/10	2010/11	2011/12	2012/13
EU	2,654	2,666	3,165	3,117	3,101
Turkey	0	0	0	0	0
Belarus	186	400	473	204	310
Russia	2,054	2,667	2,790	697	454
Ukraine	23	230	41	0	0
Other	451	450	736	916	695
Europe	**5,368**	**6,412**	**7,205**	**4,934**	**4,560**
Canada	1,177	1,208	1,171	1,283	1,305
Cuba	0	0	0	0	0
Guatemala	0	0	0	0	0
Mexico	0	0	0	0	0
USA	1,664	2,155	2,498	2,465	2,173
Other	208	270	220	251	250
Central & North America	**3,049**	**3,633**	**3,890**	**4,000**	**3,728**
Argentina	1	0	0	0	0
Brazil	0	0	0	0	0
Chile	5	1	14	4	4
Colombia	1	1	2	1	1
Peru	4	9	18	14	12
Venezuela	558	463	658	550	552
Other	51	57	61	65	65
South America	**620**	**530**	**754**	**634**	**634**
China	925	1,375	1,880	3,400	1,425
India	3,427	3,018	50	531	537
Indonesia	1,950	2,264	2,800	2,815	2,935
Iran	682	1,438	958	1,016	955
Iraq	0	0	0	0	0
Japan	1,339	1,334	1,553	1,436	1,376
Kazakhstan	331	319	469	323	410
South Korea	1,738	1,676	1,752	1,601	1,613
Malaysia	1,369	1,695	1,749	1,653	1,651
Pakistan	0	0	0	0	0
Persian Gulf	1,698	1,675	1,489	1,556	1,578
The Philippines	0	62	39	6	10
Saudi Arabia	1,084	1,282	1,206	1,292	1,291
Singapore	1	6	3	2	2
Sri Lanka	274	20	20	20	20
Syria	404	740	574	50	227
Thailand	0	0	0	0	0
Uzbekistan	199	201	207	212	217
Yemen	2	5	6	6	5
Other	1,919	1,855	2,097	2,004	1,840
Asia	**17,342**	**18,965**	**16,851**	**17,923**	**16,093**
Algeria	646	1,235	1,373	1,599	2,006
Egypt	1,202	707	1,114	1,578	1,198
Mauritius	4	3	10	24	24
Morocco	772	673	944	887	772
Nigeria	1,341	1,071	946	1,055	1,176
South Africa	1	42	53	86	40
Swaziland	0	0	0	0	0
Zimbabwe	2	25	45	15	17
Other	455	391	445	477	406
Africa	**4,423**	**4,147**	**4,931**	**5,721**	**5,640**
Australia	25	48	50	25	30
Fiji	0	0	0	0	0
New Zealand	220	202	230	231	235
Other	1	2	0	1	0
Oceania	**246**	**252**	**280**	**257**	**265**
World Total	**31,049**	**33,939**	**33,910**	**33,468**	**30,920**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years.

Table 2.24: White sugar imports (national crop year) ('000 tonnes, raw value)

Country	2008/09	2009/10	2010/11	2011/12	2012/13
EU	650	597	1,173	926	808
Turkey	5	4	5	5	5
Belarus	0	0	0	0	0
Russia	306	338	455	217	64
Ukraine	50	122	13	0	0
Other	791	727	671	636	707
Europe	**1,802**	**1,788**	**2,316**	**1,784**	**1,584**
Canada	26	35	57	41	41
Cuba	24	0	78	34	37
Guatemala	0	0	0	0	0
Mexico	159	861	312	405	544
USA	1,132	857	994	981	864
Other	215	269	280	277	269
Central & North America	**1,557**	**2,023**	**1,721**	**1,737**	**1,755**
Argentina	23	0	61	10	10
Brazil	0	0	0	0	0
Chile	628	588	586	380	473
Colombia	165	137	182	187	185
Peru	174	141	245	193	187
Venezuela	76	109	56	65	64
Other	319	178	255	248	217
South America	**1,385**	**1,154**	**1,386**	**1,082**	**1,136**
China	173	196	421	875	360
India	225	978	0	7	0
Indonesia	548	544	544	487	250
Iran	652	387	500	300	495
Iraq	822	753	793	826	862
Japan	6	6	18	14	10
Kazakhstan	62	87	107	198	116
South Korea	8	3	18	32	18
Malaysia	39	27	58	40	37
Pakistan	243	794	713	10	90
Persian Gulf	210	340	197	284	232
The Philippines	9	201	361	44	71
Saudi Arabia	120	120	120	120	125
Singapore	381	429	420	420	413
Sri Lanka	584	541	787	674	688
Syria	449	530	200	914	695
Thailand	0	1	13	4	5
Uzbekistan	312	338	328	334	341
Yemen	631	681	706	731	729
Other	2,841	2,890	3,103	3,359	3,059
Asia	**8,316**	**9,847**	**9,405**	**9,672**	**8,597**
Algeria	278	241	193	157	200
Egypt	110	160	150	114	176
Mauritius	41	28	30	15	15
Morocco	4	2	3	5	5
Nigeria	309	136	136	145	50
South Africa	127	162	118	119	130
Swaziland	0	0	1	0	0
Zimbabwe	4	28	39	24	19
Other	3,977	4,504	4,555	4,572	4,547
Africa	**4,850**	**5,262**	**5,225**	**5,151**	**5,142**
Australia	15	12	29	14	15
Fiji	7	5	18	10	10
New Zealand	20	21	21	19	20
Other	32	27	35	33	31
Oceania	**74**	**64**	**103**	**76**	**76**
World Total	**17,984**	**20,138**	**20,157**	**19,503**	**18,290**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years.

Table 2.25: Sugar supply/demand balance for 2011/12 (national crop year) ('000 tonnes, raw value)

Country	Production	Consumption	Surplus/Deficit	Imports	Exports	Stock Change
EU	18,485	18,902	(417)	4,044	2,565	1,061
Turkey	2,454	2,526	(73)	5	82	(149)
Belarus	648	520	128	204	332	0
Russia	5,462	5,849	(387)	914	326	200
Ukraine	2,528	1,919	609	0	163	446
Other	1,245	1,850	(605)	1,551	773	174
Europe	**30,822**	**31,566**	**(744)**	**6,718**	**4,241**	**1,733**
Canada	130	1,391	(1,261)	1,324	63	(0)
Cuba	1,400	656	744	34	778	0
Guatemala	2,678	762	1,916	0	1,916	(0)
Mexico	5,446	4,709	737	405	1,043	99
USA	7,527	10,428	(2,901)	3,446	227	319
Other	3,138	2,035	1,102	528	1,630	0
Central & North	**20,319**	**19,981**	**337**	**5,737**	**5,657**	**418**
Argentina	2,094	1,824	270	10	180	100
Brazil	39,383	13,190	26,193	0	26,175	17
Chile	326	800	(474)	384	0	(90)
Colombia	2,340	1,594	746	188	942	(8)
Peru	1,076	1,207	(131)	207	76	(0)
Venezuela	535	1,150	(615)	615	0	(0)
Other	1,403	1,207	196	313	377	131
South America	**47,158**	**20,973**	**26,185**	**1,716**	**27,751**	**150**
China	12,446	14,892	(2,446)	4,275	65	1,764
India	28,143	24,784	3,359	537	3,411	485
Indonesia	2,500	5,652	(3,152)	3,302	0	150
Iran	1,248	2,504	(1,256)	1,316	60	0
Iraq	0	823	(823)	826	0	3
Japan	790	2,237	(1,447)	1,450	3	(0)
Kazakhstan	14	517	(503)	521	18	0
South Korea	0	1,274	(1,274)	1,633	359	0
Malaysia	25	1,443	(1,418)	1,693	275	(0)
Pakistan	5,131	4,652	479	10	544	(55)
Persian Gulf	0	341	(341)	1,840	1,343	157
The Philippines	2,243	2,100	143	50	600	(407)
Saudi Arabia	0	971	(971)	1,412	441	0
Singapore	0	319	(319)	422	103	0
Sri Lanka	40	734	(694)	694	0	0
Syria	200	916	(716)	964	248	0
Thailand	10,840	2,762	8,078	4	8,082	(0)
Uzbekistan	0	546	(546)	546	0	(0)
Yemen	0	607	(607)	737	128	2
Other	2,131	6,396	(4,265)	5,363	754	344
Asia	**65,752**	**74,469**	**(8,717)**	**27,594**	**16,433**	**2,444**
Algeria	0	1,360	(1,360)	1,756	521	(125)
Egypt	1,925	2,973	(1,048)	1,692	105	539
Mauritius	468	41	427	39	404	62
Morocco	489	1,198	(709)	892	0	183
Nigeria	45	1,229	(1,184)	1,201	0	17
South Africa	1,985	1,879	106	206	250	62
Swaziland	695	263	432	0	432	0
Zimbabwe	399	218	181	39	220	0
Other	4,351	8,073	(3,722)	5,048	1,188	138
Africa	**10,357**	**17,232**	**(6,875)**	**10,872**	**3,120**	**877**
Australia	3,733	1,178	2,555	39	2,594	0
Fiji	186	41	145	10	155	(0)
New Zealand	0	229	(229)	250	21	(0)
Other	39	73	(33)	33	1	(1)
Oceania	**3,958**	**1,521**	**2,437**	**332**	**2,771**	**(1)**
World Total	**178,366**	**165,743**	**12,622**	**52,971**	**59,973**	**5,620**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years. For this reason, they do not equal the totals in Table 1.1.

Table 2.26: Sugar supply/demand balance for 2012/13 (national crop year) ('000 tonnes, raw value)

Country	Production	Consumption	Surplus/Deficit	Imports	Exports	Stock Change
EU	17,070	19,011	(1,940)	3,909	1,814	155
Turkey	2,387	2,560	(173)	5	50	(218)
Belarus	568	522	46	310	356	(0)
Russia	5,658	5,850	(192)	518	326	(0)
Ukraine	2,276	1,916	360	0	180	180
Other	1,231	1,869	(639)	1,402	730	32
Europe	**29,189**	**31,727**	**(2,538)**	**6,144**	**3,457**	**149**
Canada	138	1,417	(1,279)	1,346	67	(0)
Cuba	1,450	661	789	37	826	0
Guatemala	2,492	784	1,708	0	1,708	(0)
Mexico	5,545	4,685	860	544	1,270	134
USA	7,938	10,533	(2,596)	3,037	227	214
Other	3,198	2,069	1,129	519	1,647	1
Central & North	**20,760**	**20,150**	**610**	**5,483**	**5,745**	**348**
Argentina	2,046	1,828	218	10	228	(0)
Brazil	37,227	13,439	23,788	0	23,788	0
Chile	340	817	(477)	477	0	0
Colombia	2,306	1,607	699	186	885	0
Peru	1,103	1,224	(121)	199	78	0
Venezuela	557	1,173	(616)	616	0	(0)
Other	1,434	1,232	202	282	419	65
South America	**45,012**	**21,318**	**23,694**	**1,770**	**25,398**	**65**
China	13,507	15,218	(1,711)	1,785	74	0
India	26,094	25,279	815	537	1,352	(0)
Indonesia	2,603	5,787	(3,185)	3,185	0	0
Iran	1,160	2,558	(1,398)	1,450	52	0
Iraq	0	862	(862)	862	0	0
Japan	838	2,222	(1,384)	1,386	2	(0)
Kazakhstan	15	523	(509)	526	17	0
South Korea	0	1,278	(1,278)	1,631	353	(0)
Malaysia	26	1,475	(1,449)	1,688	239	0
Pakistan	4,758	4,848	(90)	90	0	(0)
Persian Gulf	0	353	(353)	1,810	1,408	49
The Philippines	2,200	2,135	65	81	146	(0)
Saudi Arabia	0	996	(996)	1,416	419	0
Singapore	0	324	(324)	415	91	(0)
Sri Lanka	42	750	(708)	708	0	(0)
Syria	208	936	(728)	922	194	(0)
Thailand	10,050	2,849	7,201	5	7,206	(0)
Uzbekistan	0	558	(558)	558	0	0
Yemen	0	631	(631)	734	103	1
Other	2,164	6,589	(4,425)	4,900	504	(30)
Asia	**63,664**	**76,173**	**(12,509)**	**24,690**	**12,161**	**20**
Algeria	0	1,390	(1,390)	2,206	674	142
Egypt	1,800	3,069	(1,269)	1,374	105	(0)
Mauritius	439	41	398	39	437	0
Morocco	491	1,218	(727)	777	0	50
Nigeria	50	1,276	(1,226)	1,226	0	(0)
South Africa	2,346	1,916	430	170	600	(0)
Swaziland	738	266	472	0	472	0
Zimbabwe	495	223	273	36	309	(0)
Other	4,765	8,400	(3,635)	4,953	1,338	(19)
Africa	**11,124**	**17,799**	**(6,675)**	**10,782**	**3,934**	**172**
Australia	4,401	1,194	3,207	45	3,252	0
Fiji	173	42	131	10	141	0
New Zealand	0	232	(232)	255	23	(0)
Other	38	74	(36)	32	1	(5)
Oceania	**4,612**	**1,542**	**3,071**	**342**	**3,417**	**(5)**
World Total	**174,362**	**168,709**	**5,653**	**49,210**	**54,112**	**751**

Note: Regional and global totals must be interpreted with caution as they are an aggregate of countries with different crop years. For this reason, they do not equal the totals in Table 1.1.

Table 2.27: World sugar balance, 1990-2012 ('000 tonnes, raw value)

	World Consumption	World Production	Apparent Surplus/ Deficit	Statistical [1] Adjustment	Actual Surplus/ Deficit	Actual Stock Total	LMC [2] Stock Index
1990	107,144	110,122	2,978	(1,956)	1,022	54,235	1.57
1991	108,803	112,211	3,409	(959)	2,450	56,685	1.62
1992	110,998	116,663	5,665	492	6,157	62,842	1.79
1993	111,418	111,546	129	(1,189)	(1,061)	61,782	1.74
1994	113,309	110,646	(2,663)	(1,156)	(3,820)	57,962	1.59
1995	114,385	116,798	2,413	(1,852)	561	58,523	1.59
1996	118,329	124,697	6,367	(2,520)	3,847	62,371	1.64
1997	120,191	126,179	5,988	(3,030)	2,958	65,329	1.71
1998	122,451	126,795	4,345	(3,795)	550	65,879	1.71
1999	125,711	134,917	9,206	(4,290)	4,916	70,795	1.78
2000	129,003	131,834	2,832	(2,193)	639	71,434	1.74
2001	131,711	132,362	651	(2,563)	(1,912)	69,522	1.65
2002	138,981	141,865	2,884	(2,481)	402	69,924	1.57
2003	140,924	149,095	8,171	(1,134)	7,037	76,961	1.73
2004	146,767	147,691	924	(3,458)	(2,535)	74,427	1.58
2005	147,722	142,221	(5,500)	(1,612)	(7,113)	67,314	1.36
2006	150,849	154,772	3,923	(3,031)	892	68,207	1.35
2007	156,735	165,253	8,518	(953)	7,565	75,772	1.48
2008	159,327	162,960	3,633	(2,961)	671	76,443	1.49
2009	161,396	152,347	(9,050)	(1,246)	(10,295)	66,148	1.18
2010	162,607	156,778	(5,830)	(2,192)	(8,022)	59,067	1.02
2011	163,864	173,766	9,902	(2,209)	7,693	66,760	1.17
2012	*167,065*	*176,181*	*9,116*	*(2,252)*	*6,864*	*73,624*	*1.30*

Notes: 1. A statistical adjustment is included to account for unrecorded consumption.
2. Year-End index of the stock total divided by world consumption (September 1980=1.00).

Table 2.28: World sugar balance — by October/September crop years[1], 1989/90-2012/13 ('000 tonnes, raw value)

	World Consumption	World Production	Apparent Surplus/ Deficit	Statistical[2] Adjustment	Actual Surplus/ Deficit	Actual Stock Total	LMC[3] Stock Index
1989/90	107,632	108,430	798	(2,798)	(2,000)	36,302	1.34
1990/91	108,309	114,014	5,705	(2,185)	3,520	39,822	1.47
1991/92	110,368	115,349	4,981	(689)	4,293	44,114	1.61
1992/93	111,256	110,821	(435)	(1,335)	(1,770)	42,345	1.53
1993/94	113,154	111,709	(1,444)	(1,827)	(3,272)	39,073	1.41
1994/95	114,031	116,702	2,670	(268)	2,403	41,476	1.48
1995/96	117,202	122,296	5,094	(2,425)	2,669	44,145	1.52
1996/97	119,757	126,237	6,480	(2,958)	3,522	47,667	1.62
1997/98	122,182	126,288	4,106	(4,809)	(703)	46,964	1.57
1998/99	124,571	134,364	9,793	(2,948)	6,844	53,808	1.74
1999/00	128,081	133,229	5,148	(2,291)	2,857	56,665	1.79
2000/01	131,283	130,877	(406)	(2,358)	(2,764)	53,901	1.67
2001/02	137,460	138,046	586	(2,399)	(1,813)	52,088	1.54
2002/03	140,276	149,697	9,421	(2,697)	6,724	58,812	1.71
2003/04	145,287	143,576	(1,711)	(2,294)	(4,006)	54,806	1.49
2004/05	147,269	143,823	(3,446)	(1,373)	(4,819)	49,987	1.38
2005/06	150,123	151,104	981	(2,642)	(1,660)	48,327	1.33
2006/07	155,446	164,823	9,377	(3,039)	6,338	54,666	1.44
2007/08	159,090	167,398	8,307	(1,993)	6,314	60,980	1.56
2008/09	160,475	149,969	(10,506)	(1,414)	(11,919)	49,061	1.26
2009/10	163,085	159,995	(3,090)	(1,292)	(4,382)	44,679	1.14
2010/11	162,675	167,548	4,873	(2,193)	2,669	47,347	1.20
2011/12	*166,268*	*174,656*	*8,388*	*(2,242)*	*6,147*	*53,494*	*1.33*
2012/13	*169,112*	*178,633*	*9,521*	*(2,280)*	*7,240*	*60,734*	*1.48*

Notes:
1. Individual country crop years are adjusted to reflect the international sugar season running October/ September.
2. A statistical adjustment is included to account for unrecorded consumption.
3. Year-End index of the stock total divided by world consumption (1980 = 1.00).

Table 2.29: Quarterly global sugar supply/demand balances ('000 tonnes, raw value)

	World Consumption	World Production	Apparent Surplus/ Deficit	Statistical Adjustment [1]	Actual Surplus/ Deficit	Actual Stock Total	LMC Stock Index [2]
2001.Q1	32,139	39,874	7,735	(641)	7,095	77,575	1.70
2001.Q2	33,526	17,393	(16,133)	(641)	(16,774)	62,533	1.67
2001.Q3	33,250	25,114	(8,136)	(641)	(8,776)	53,901	1.67
2001.Q4	32,797	49,981	17,184	(641)	16,543	69,522	1.65
2002.Q1	33,603	42,880	9,276	(620)	8,656	77,513	1.59
2002.Q2	35,948	19,017	(16,931)	(620)	(17,551)	61,897	1.52
2002.Q3	35,111	26,168	(8,943)	(620)	(9,564)	52,088	1.54
2002.Q4	34,319	53,800	19,482	(620)	18,861	69,924	1.57
2003.Q1	35,255	45,052	9,798	(283)	9,514	79,489	1.54
2003.Q2	35,237	23,311	(11,927)	(283)	(12,210)	66,957	1.70
2003.Q3	35,465	27,534	(7,932)	(283)	(8,215)	58,812	1.71
2003.Q4	34,967	53,198	18,231	(283)	17,948	76,961	1.73
2004.Q1	35,678	43,147	7,469	(865)	6,604	82,687	1.60
2004.Q2	36,499	18,305	(18,194)	(865)	(19,059)	64,347	1.57
2004.Q3	38,144	28,926	(9,218)	(865)	(10,082)	54,806	1.49
2004.Q4	36,447	57,313	20,867	(865)	20,002	74,427	1.58
2005.Q1	36,500	38,416	1,916	(403)	1,513	75,952	1.37
2005.Q2	36,699	18,490	(18,209)	(403)	(18,612)	58,058	1.38
2005.Q3	37,624	29,604	(8,019)	(403)	(8,422)	49,987	1.38
2005.Q4	36,899	55,711	18,812	(403)	18,409	67,314	1.36
2006.Q1	37,218	42,242	5,023	(758)	4,266	70,733	1.19
2006.Q2	38,227	21,244	(16,983)	(758)	(17,741)	54,240	1.22
2006.Q3	37,779	31,908	(5,871)	(758)	(6,629)	48,327	1.33
2006.Q4	37,625	59,379	21,754	(758)	20,996	68,207	1.35
2007.Q1	38,685	52,111	13,427	(238)	13,188	81,134	1.38
2007.Q2	39,710	22,872	(16,838)	(238)	(17,076)	64,057	1.42
2007.Q3	39,426	30,461	(8,965)	(238)	(9,203)	54,666	1.44
2007.Q4	38,914	59,809	20,894	(238)	20,656	75,772	1.48
2008.Q1	39,205	52,489	13,284	(740)	12,544	87,797	1.53
2008.Q2	40,604	24,839	(15,766)	(740)	(16,506)	71,494	1.56
2008.Q3	40,367	30,262	(10,106)	(740)	(10,846)	60,980	1.56
2008.Q4	39,151	55,371	16,220	(740)	15,480	76,443	1.49
2009.Q1	39,635	43,775	4,141	(311)	3,829	80,724	1.32
2009.Q2	40,995	21,475	(19,520)	(311)	(19,831)	60,546	1.28
2009.Q3	40,694	29,348	(11,346)	(311)	(11,658)	49,061	1.26
2009.Q4	40,072	57,748	17,676	(311)	17,364	66,148	1.18
2010.Q1	40,372	45,131	4,759	(548)	4,211	70,539	1.03
2010.Q2	41,429	24,730	(16,700)	(548)	(17,248)	54,052	1.11
2010.Q3	41,212	32,386	(8,825)	(548)	(9,373)	44,679	1.14
2010.Q4	39,595	54,531	14,936	(548)	14,388	59,067	1.02
2011.Q1	40,479	49,236	8,757	(552)	8,204	67,271	0.95
2011.Q2	41,481	27,730	(13,751)	(552)	(14,304)	52,967	1.08
2011.Q3	41,120	36,052	(5,068)	(552)	(5,620)	47,347	1.20
2011.Q4	40,783	60,748	19,965	(552)	19,412	66,760	1.17
2012.Q1	*41,202*	*55,907*	*14,705*	*(563)*	*14,142*	*80,902*	*1.25*
2012.Q2	*42,321*	*21,857*	*(20,464)*	*(563)*	*(21,027)*	*59,874*	*1.22*
2012.Q3	*41,961*	*36,144*	*(5,817)*	*(563)*	*(6,381)*	*53,494*	*1.33*
2012.Q4	*41,581*	*62,274*	*20,693*	*(563)*	*20,130*	*73,624*	*1.30*
2013.Q1	41,733	54,031	12,298	(573)	11,726	85,349	1.33
2013.Q2	43,122	26,209	(16,913)	(573)	(17,486)	67,864	1.38

Notes:
1. A statistical adjustment is included to account for unrecorded consumption.
2. Index of Seasonally Adjusted Stock Total divided by World Consumption (1980=1.00).
3. Due to the difficulties of estimating quarterly statistical adjustments, we have assumed the calendar year statistical adjustment is spread evenly over the quarters.

Chapter 3: Sugar By-Products and Ethanol

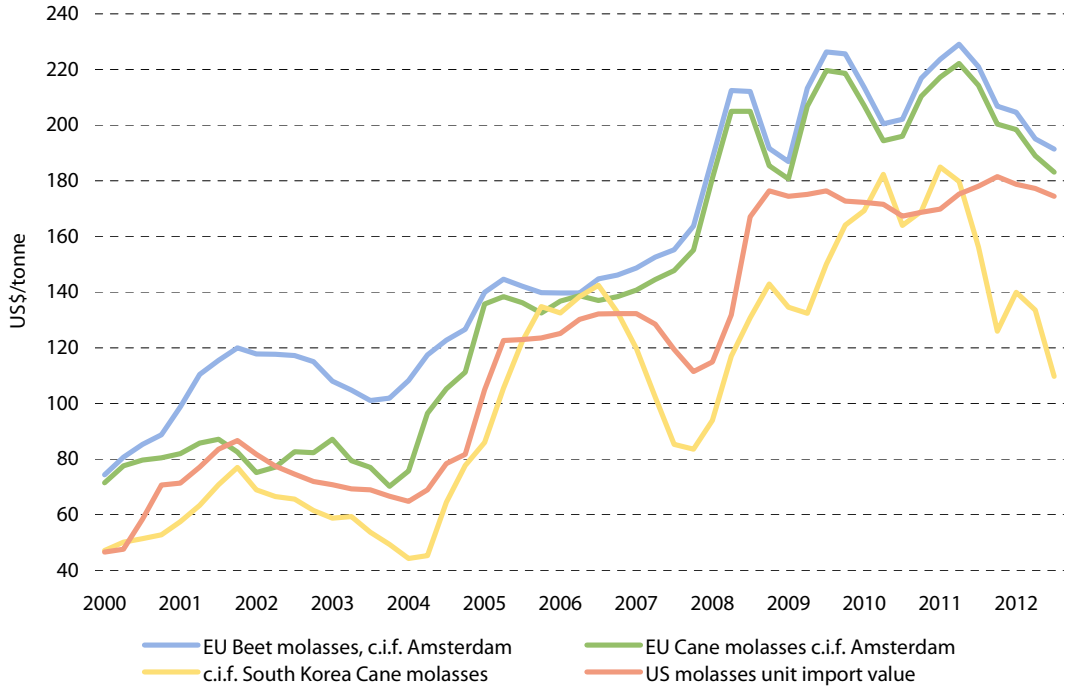
Molasses

World molasses

We have revised our estimate of world molasses production for 2011/12 upwards slightly during the past quarter to 46.4 million tonnes (Table 3.3). This is an increase of around 0.5 million tonnes since our last *Sugar Quarterly*. While our estimates for EU production have declined over this period, this has been outweighed by an improved outlook for molasses production in Russia, Indonesia and Australia. Looking ahead to 2012/13, we have also increased our forecasts, with global production now projected to be in the region of 45.5 million tonnes, an increase of 670,000 tonnes from our last estimate. This is the result of an increase in our forecasts for molasses production in Thailand, Russia and Australia.

The large molasses crops in several key molasses producing and exporting Asian countries, most notably India and Thailand, have continued to weigh heavily on molasses prices in a number of key import markets (Diagram 3.1). Prices in the EU have continued to decline steadily during the past quarter, with EU beet and cane molasses prices averaging $190/tonne and $183/tonne, respectively, compared to $195/tonne and $189/tonne during Q2. The same trend is evident in South Korea, where prices fell from $134/tonne during Q2 to $115/tonne during Q3 to date. In the US, prices have also been kept in check by the prospect of large domestic beet molasses crop.

Diagram 3.1: Molasses prices in key import markets — the EU, South Korea and the US



However, while molasses prices have been falling in most markets, grain prices have been moving sharply in the opposite direction. Corn prices have now reached $330/tonne, while barley is trading at $290/tonne. As we will discuss, the substitutability of molasses and grains in the animal feed market means that the level of grain prices could have an important influence on molasses demand going forward.

Table 3.1: Beet pulp, molasses, corn and barley prices — by quarter (US$ per tonne)

	US Cane f.o.b. Gulf (US$/mt)	US Molasses Dried Beet Pulp (Los Angeles)	US No.2 Yellow Maize Price (Chicago)	EU Cane Molasses (Amsterdam)	EU Beet Molasses (Amsterdam)	EU Beet Pulp (Rotterdam)	EU Feed Barley (Hamburg)
2002.Q1	81.7	110.2	80.7	75.1	117.8	121.2	97.5
2002.Q2	77.4	114.8	82.9	77.1	117.7	120.6	95.9
2002.Q3	74.6	121.3	100.3	82.7	117.1	119.0	99.2
2002.Q4	72.0	121.3	97.8	82.3	115.0	108.6	111.5
Total 2002	**76.3**	**116.9**	**90.4**	**79.3**	**116.9**	**117.4**	**101.0**
2003.Q1	70.7	121.3	95.8	87.1	108.0	123.0	121.4
2003.Q2	69.2	106.3	98.3	79.4	104.8	127.6	127.3
2003.Q3	68.9	105.1	90.2	76.9	101.1	123.1	126.5
2003.Q4	66.6	107.9	94.2	70.1	101.8	154.7	158.5
Total 2003	**68.9**	**110.2**	**94.6**	**78.4**	**103.9**	**132.1**	**133.4**
2004.Q1	64.7	110.8	112.3	75.7	108.2	171.7	177.0
2004.Q2	68.9	115.7	118.6	96.5	117.5	166.0	145.8
2004.Q3	78.3	118.5	92.2	105.3	122.7	147.2	130.9
2004.Q4	81.7	114.3	78.6	111.3	126.7	127.4	139.9
Total 2004	**73.4**	**114.9**	**100.4**	**97.2**	**118.8**	**153.0**	**148.4**
2005.Q1	104.9	113.5	81.0	135.7	139.9	139.8	144.7
2005.Q2	122.6	114.5	83.6	138.4	144.6	129.4	139.6
2005.Q3	123.0	115.7	84.7	136.2	142.0	124.0	128.4
2005.Q4	123.5	122.3	74.9	132.5	139.7	119.8	130.6
Total 2005	**118.5**	**116.5**	**81.1**	**135.7**	**141.6**	**128.2**	**135.8**
2006.Q1	125.2	121.3	81.5	136.8	139.6	134.7	131.0
2006.Q2	130.2	116.2	89.4	138.8	139.6	144.7	135.1
2006.Q3	132.2	115.7	89.1	137.0	144.7	154.7	140.8
2006.Q4	132.3	115.7	128.4	138.4	146.1	176.0	182.9
Total 2006	**129.9**	**117.2**	**97.1**	**137.8**	**142.5**	**152.5**	**147.4**
2007.Q1	132.3	115.7	153.4	140.7	148.6	215.4	191.6
2007.Q2	128.5	146.3	146.8	144.5	152.5	255.5	199.7
2007.Q3	119.3	148.8	131.0	147.7	155.2	296.1	292.3
2007.Q4	111.4	148.8	151.6	155.1	163.7	308.6	343.1
Total 2007	**122.7**	**139.9**	**145.7**	**147.0**	**155.0**	**268.9**	**256.7**
2008.Q1	114.9	155.6	200.8	180.9	188.1	346.5	342.9
2008.Q2	131.9	192.9	243.5	205.0	212.4	316.9	299.4
2008.Q3	167.0	192.9	214.8	205.0	212.1	294.5	238.3
2008.Q4	176.4	200.3	144.3	185.4	191.6	186.9	157.3
Total 2008	**147.5**	**185.4**	**200.9**	**194.1**	**201.0**	**286.2**	**259.5**
2009.Q1	174.5	152.8	148.2	180.7	186.9	149.0	148.8
2009.Q2	175.1	121.7	160.7	206.8	213.3	152.5	153.5
2009.Q3	176.4	123.2	135.7	219.6	226.3	150.3	146.7
2009.Q4	172.8	121.3	148.1	218.6	225.6	143.0	154.5
Total 2009	**174.7**	**129.7**	**148.2**	**206.4**	**213.0**	**148.7**	**150.8**
2010.Q1	172.2	121.7	140.4	207.0	213.6	148.2	143.9
2010.Q2	171.6	126.8	139.5	194.4	200.5	147.1	140.4
2010.Q3	167.3	126.8	161.7	196.0	202.1	202.1	224.3
2010.Q4	168.7	139.3	215.6	210.4	216.9	263.2	264.1
Total 2010	**169.9**	**128.6**	**164.3**	**202.0**	**208.3**	**190.1**	**193.2**
2011.Q1	169.8	173.0	257.4	217.2	223.7	323.9	284.0
2011.Q2	175.3	215.9	285.3	222.2	229.0	338.8	287.0
2011.Q3	178.1	237.2	275.7	214.3	221.0	314.4	280.1
2011.Q4	181.5	275.6	245.9	200.4	206.8	221.0	258.1
Total 2011	**176.2**	**225.4**	**266.1**	**213.5**	**220.1**	**299.5**	**277.3**
2012.Q1	178.7	264.0	253.7	198.4	204.6	239.1	270.0
2012.Q2	177.2	228.3	253.9	188.9	195.0	286.5	284.8
2012.Q3[1]	*174.4*	*237.8*	*315.1*	*183.0*	*191.3*	*282.3*	*293.7*

Notes: 1. Figures in italics are based upon incomplete coverage of the period in question.

Table 3.2: World molasses prices — by quarter (US$ per tonne)

	US Cane molasses f.o.b. Gulf (US$/mt)	Pakistan Cane Molasses (f.o.b.) [2]	South Korea Cane Molasses (c.i.f.) [2]	Philippines Cane Molasses (ex-mill)	Thailand Cane Molasses (f.o.b.) [2]
2002.Q1	81.7	-	68.9	59.9	47.0
2002.Q2	77.4	-	66.5	59.9	46.3
2002.Q3	74.6	-	65.6	56.2	45.1
2002.Q4	72.0	-	61.5	55.9	43.0
Total 2002	**76.3**	**39.2**	**65.6**	**58.0**	**45.3**
2003.Q1	70.7	-	58.8	54.1	42.1
2003.Q2	69.2	-	59.3	52.5	40.4
2003.Q3	68.9	-	53.7	52.1	33.3
2003.Q4	66.6	-	49.3	45.2	26.5
Total 2003	**68.9**	**34.9**	**55.3**	**51.0**	**35.6**
2004.Q1	n/a	-	44.2	41.7	23.0
2004.Q2	68.9	-	45.3	40.0	24.2
2004.Q3	78.3	-	64.4	45.1	33.7
2004.Q4	81.7	-	77.7	49.5	36.7
Total 2004	**73.4**	**32.1**	**57.9**	**44.1**	**29.4**
2005.Q1	104.9	-	86.0	67.3	47.4
2005.Q2	122.6	-	105.5	81.1	55.1
2005.Q3	123.0	-	122.4	78.9	71.7
2005.Q4	123.5	-	134.8	86.8	78.4
Total 2005	**118.5**	**64.1**	**112.2**	**78.5**	**63.2**
2006.Q1	125.2	-	132.5	100.8	84.2
2006.Q2	130.2	-	138.4	90.4	84.6
2006.Q3	132.2	-	142.4	96.0	84.0
2006.Q4	132.3	-	132.8	87.8	75.9
Total 2006	**129.9**	**88.3**	**136.5**	**93.7**	**82.2**
2007.Q1	132.3	-	119.7	83.2	74.4
2007.Q2	128.5	-	102.2	80.7	70.8
2007.Q3	119.3	-	85.3	83.0	60.4
2007.Q4	111.4	-	83.5	94.6	55.3
Total 2007	**122.7**	**75.8**	**97.7**	**85.4**	**65.2**
2008.Q1	114.9	-	94.0	102.6	58.9
2008.Q2	131.9	-	116.9	95.4	63.9
2008.Q3	167.0	-	130.8	92.0	67.6
2008.Q4	176.4	-	142.9	83.2	83.5
Total 2008	**147.5**	**73.6**	**121.1**	**93.3**	**68.5**
2009.Q1	174.5	-	134.6	84.5	82.8
2009.Q2	175.1	-	132.4	88.0	104.1
2009.Q3	176.4	-	150.1	112.4	111.1
2009.Q4	172.8	-	164.0	132.4	110.4
Total 2009	**174.7**	**113.6**	**145.3**	**104.3**	**102.1**
2010.Q1	172.2	-	169.3	161.4	120.1
2010.Q2	171.6	-	182.3	188.7	107.7
2010.Q3	167.3	-	164.0	191.1	154.1
2010.Q4	168.7	-	169.0	196.8	155.1
Total 2010	**169.9**	**99.1**	**171.1**	**184.5**	**134.3**
2011.Q1	169.8	-	184.9	142.7	132.2
2011.Q2	175.3	-	179.7	79.9	149.9
2011.Q3	178.1	-	156.3	59.4	131.0
2011.Q4	181.5	-	126.0	70.8	89.9
Total 2011	**176.2**	**121.1**	**161.7**	**88.2**	**125.7**
2012.Q1	178.7	-	139.9	95.7	68.4
2012.Q2	*177.2*	-	133.6	101.8	68.9
2012.Q3[2]	*174.4*	-	*109.7*	*98.4*	*66.1*

Notes:
1. Figures in italics are based upon incomplete coverage of the period in question.
2. Prices for Pakistan, South Korea and Thailand are derived from trade data and may therefore lag world quotations.

Table 3.3: Molasses production by region and country[1] ('000 tonnes)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
EU-27	3,694	3,402	3,100	3,332	3,120	3,700	3,360
Turkey	457	481	586	678	600	610	610
Russia	911	996	1,026	845	920	1,650	1,600
Others	1,353	1,082	919	803	1,100	1,330	1,160
Europe	**6,415**	**5,961**	**5,632**	**5,658**	**5,740**	**7,290**	**6,740**
Cuba	330	400	370	295	300	360	360
Dominican Republic	177	179	177	177	150	160	160
El Salvador	206	202	200	192	200	250	230
Guatemala	548	540	560	580	530	640	590
Mexico	1,768	1,844	1,491	1,492	1,660	1,560	1,630
US	2,265	2,217	1,952	2,217	2,120	2,200	2,370
Others	755	651	641	724	630	740	790
North/Central America	**6,049**	**6,033**	**5,392**	**5,677**	**5,590**	**5,900**	**6,130**
Colombia	270	250	227	279	240	250	260
Others	2,024	1,940	2,055	1,956	1,960	2,000	2,040
South America	**2,294**	**2,190**	**2,282**	**2,235**	**2,200**	**2,250**	**2,300**
India	13,089	11,313	6,546	8,400	10,910	11,770	10,830
Indonesia	1,330	1,498	1,395	1,524	1,330	1,360	1,470
Pakistan	1,911	2,664	1,536	1,557	2,130	2,370	2,210
Philippines	946	1,057	839	775	1,010	900	870
Thailand	2,999	3,252	2,754	2,977	4,240	4,390	4,130
Others	5,710	6,587	5,493	4,997	4,980	5,410	5,700
Asia	**25,986**	**26,371**	**18,563**	**20,230**	**24,600**	**26,200**	**25,210**
Egypt	696	683	585	600	650	660	610
South Africa	835	817	773	757	720	710	800
Others	1,854	1,852	1,952	1,996	2,230	2,280	2,560
Africa	**3,385**	**3,352**	**3,310**	**3,353**	**3,600**	**3,650**	**3,970**
Australia	1,070	950	900	900	830	1,000	1,020
Fiji	157	115	120	136	110	130	130
Others	15	16	15	14	20	10	10
Oceania	**1,242**	**1,081**	**1,035**	**1,050**	**960**	**1,140**	**1,160**
World Total	**45,370**	**44,987**	**36,213**	**38,202**	**42,690**	**46,430**	**45,510**

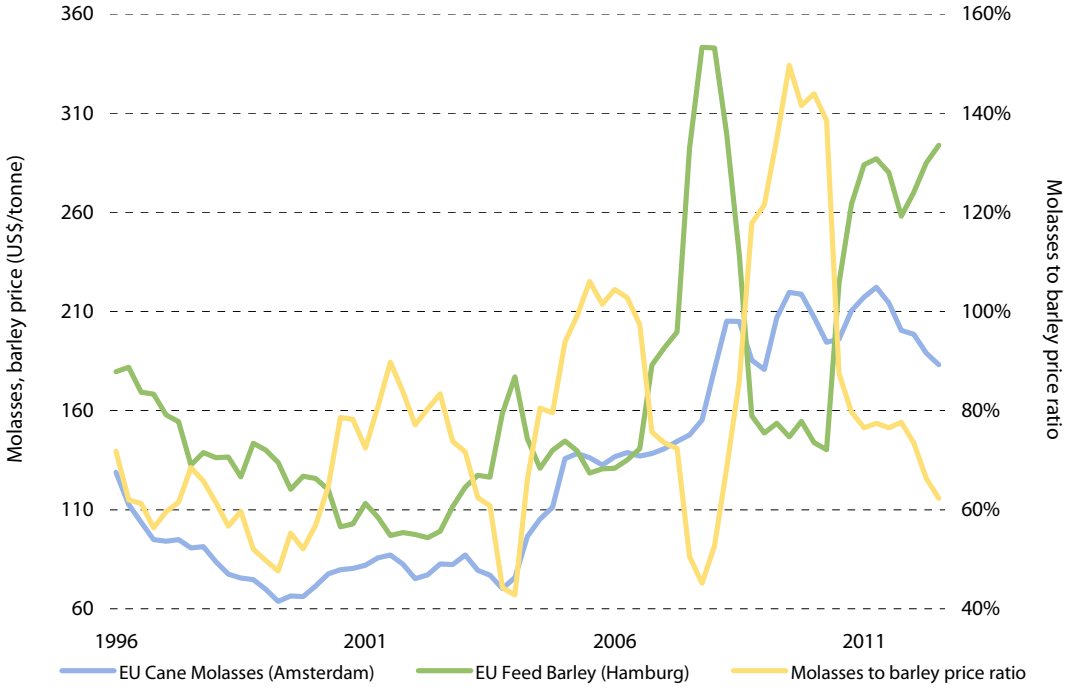
Note: 1. Does not include Brazil as almost all Brazilian molasses is used for ethanol production.

EU molasses

Molasses production estimates in the EU for the 2011/12 have fallen marginally from our last *Sugar Quarterly*, and currently stand at 3.7 million tonnes. Despite this reduction, this level of production still represents an increase of around 580,000 tonnes from the previous year due to the plentiful sugar crop last year. Looking ahead to 2012/13, we are anticipating molasses production to fall slightly to around 3.4 million tonnes.

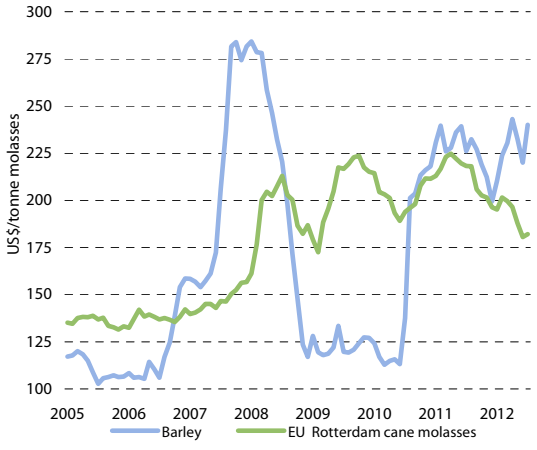
Diagram 3.2 presents prices of EU cane molasses and feed barley, along with the molasses-to-barley price ratio. During Q3 2012 to date, EU cane molasses prices have fallen to $183/tonne, from $189/tonne during the previous quarter. Meanwhile, barley prices have increased to $294/tonne from $285/tonne during the same period. The combined effect of these two price movements has seen the molasses to barley ratio fall from 66% to 62%. As we will discuss, high and rising barely prices should provide some support to molasses prices going forward.

Diagram 3.2: Relationship between EU molasses and barley prices



The relative prices of molasses and barley are important to animal feed end-users in the EU, as a sizeable portion of their demand for feed ingredients can be met by either molasses or grains. In order to accurately compare their relative competitiveness as an animal feed component, we have put barley prices onto a molasses equivalent basis in Diagram 3.3. This takes into account their relative calorific content, which is critical for its use in animal feed.

Diagram 3.3: EU molasses and barley on a molasses equivalent price basis



The diagram shows that on a molasses equivalent basis, molasses and barley prices have become detached recently. From mid-2010 to the end of 2011, the differential between the two prices averaged just $10/tonne. However, by July 2012 this had increased to almost $60/tonne.

One reason for the divergence has been improved export availability in Asia, with India and Thailand, which have produced large sugar harvests, resulting in more molasses being available for export, particularly from Thailand. This has pulled down the molasses price, at a time when barley prices are being driven upwards by the poor corn crop in the US.

If barley prices remain high, this should be supportive for molasses demand in the EU, which in turn should offer some support to prices although the upside will be limited by the size of the surplus in Asia.

Table 3.4: Molasses exports by key exporters ('000 tonnes)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Europe							
EU-27	31	61	0	77	50	20	50
Eastern Europe							
Russia	288	252	299	179	96	500	400
North/Central America							
Dominican Republic	52	98	66	73	70	70	70
El Salvador	157	135	127	196	140	210	200
Guatemala	354	292	449	309	360	130	270
Mexico	134	373	153	65	310	130	170
US	320	350	336	353	350	260	320
Asia							
India	640	551	89	178	1,300	310	300
Indonesia	446	552	748	557	520	490	520
Pakistan	447	269	886	333	60	100	80
Philippines	69	63	222	106	190	280	190
Thailand	471	792	499	257	210	1,060	300
Africa							
Egypt	369	241	112	318	250	300	290
South Africa	0	0	0	0	0	0	0
Oceania							
Australia	339	262	299	257	290	540	500
Fiji	126	97	175	125	70	60	60

Asian molasses

We are estimating that Asia will produce in the region of 26 million tonnes of molasses in 2011/12. Looking ahead to 2012/13, we are projecting production will decline slightly to 25.2 million tonnes, due to smaller sugar crops in India and Thailand.

Diagrams 3.4 and 3.5 show export data for Pakistan and Thailand, respectively, and compare molasses exports during each quarter over the last four crop years. Diagram 3.4 shows that Pakistan exports have been well below historical levels, with less than 100,000 tonnes exported so far in 2011/12. Furthermore, the European Parliament is expected to vote in September 2012 on duty-free trade concessions for Pakistan. If implemented, the concessions would become enforced from October 2012 and would include an 80,000 tonne/year duty free quota for ethanol. Should this measure be approved, then we would expect molasses exports to remain at depressed levels 2012/13 as well.

Conversely, exports in Thailand have soared during 2011/12, standing at 750,000 tonnes by the end of Q2. However, future exports may be influenced by the government's announcement to remove unblended gasoline-91 from the market from October 2012. This will be replaced by a 10% ethanol blend. Gasoline-91 is currently the most popular fuel at the pumps, and accounts for 45% of the total gasoline market. Replacing this with a 10% ethanol blend could see Thai ethanol demand almost double, and so the potential increase in production required to fulfil projected demand for an E-10 blend could limit molasses export availability for 2012/13. While it is difficult to estimate exports accurately at this early stage, we are tentatively projecting this to decline to 300,000 tonnes.

The Indian Council for Research on International Economic Relations (ICRIER) has stated that current fuel ethanol production costs ($0.48/litre) are barely being covered by the reference price ($0.49/litre). Industry sources suggest that the Indian Cabinet is likely to adopt a revised reference pricing formula for fuel ethanol later this month. It is thought that the reference price would reflect the lower energy content of ethanol as well as tax incentives. The Saumitra Chaudhuri Committee has recommended a price range from approximately $0.42/litre-$0.56/litre ($1= INR56.03). Looking ahead, we estimate that total Indian ethanol production will increase by over 30% in 2012 to 2.27 billion litres, due to higher sugar production. This would require in the region of 9.0 million tonnes of molasses; a sizeable portion of total molasses production, which we estimate to be approximately 11 million tonnes. Of this, around 1.85 billion litres will take the form of industrial ethanol or will be used in beverages. Consequently, it seems that the high level of sugar production is unlikely to be translated into higher export availability for molasses.

Elsewhere in Asia, the ethanol market in the Philippines is growing due to the introduction of a 10% blend. Demand for imported ethanol is expected to reach 400 million litres in 2012. With local production capacity limited, the Philippines have been heavily reliant on imports. Imports from Thailand alone reached 83 million litres during the first half of 2012.

Diagram 3.4: Pakistan molasses exports

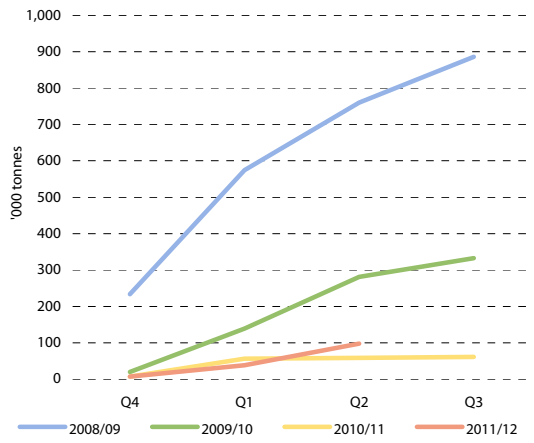


Diagram 3.5: Thai molasses exports

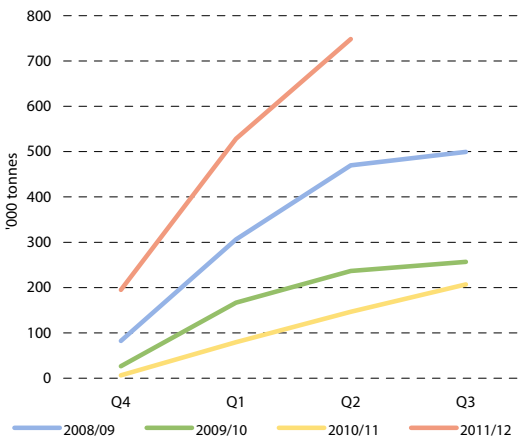
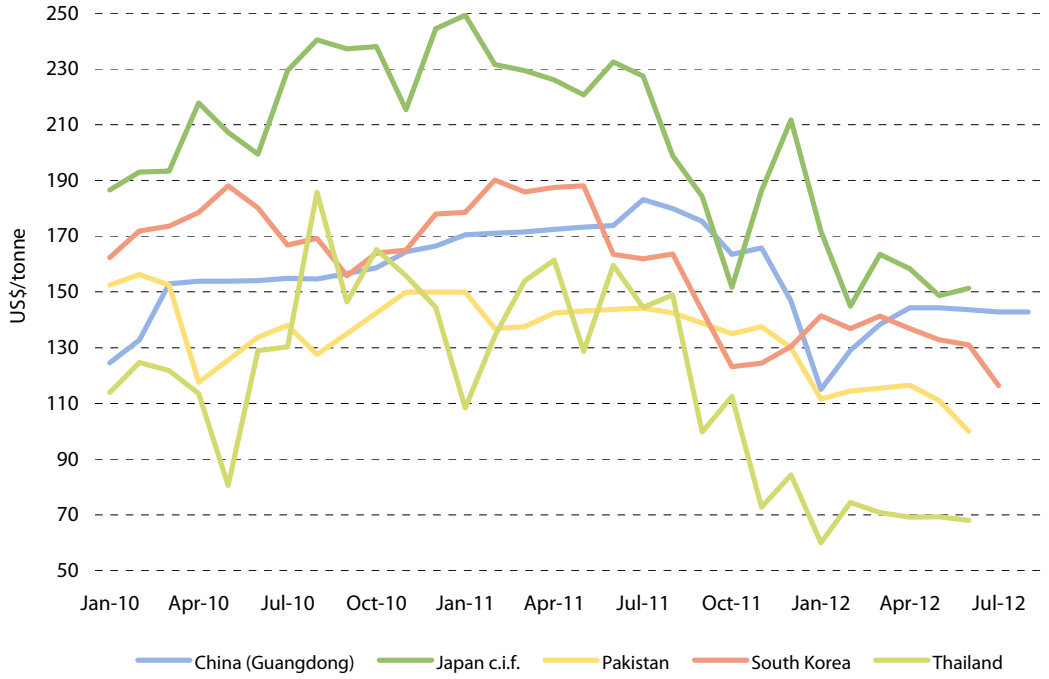


Diagram 3.7 presents a selection of Asian molasses prices, and illustrates that the majority of these have followed a downward trend in recent months. Prices in Thailand are particularly depressed at under $70/tonne, weighed down by the size of the bumper sugar crops. Prices in Japan, Pakistan and South Korea are all trading at currently low levels by historical standards, indicating that the relatively high levels of molasses production in Asia are weighing heavily on molasses prices.

Diagram 3.7: Asian molasses prices (based on unit import values)



US molasses

In the US, molasses prices have remained relatively stable and are currently trading at around US$170 per tonne (as of mid August). Prices have remained fairly subdued despite sharply rising corn prices, which has been the result of the worst drought in half a century. As a result, the molasses corn ratio has fallen to just 55% in the third quarter of the year (Diagram 3.6). Given that molasses and corn are substitutes in the animal feed sector, rising corn prices should, in theory, provide some support for molasses values. However, the US molasses sector is currently facing the prospect of large quantities of beet molasses hitting the market later in the year when the 2012/13 beet harvest starts. The outlook for this year's beet harvest is positive despite the drought, suggesting that beet molasses availability will increase compared to last year. This is keeping molasses prices under pressure in the near term.

Diagram 3.6: Relationship between US molasses and corn prices

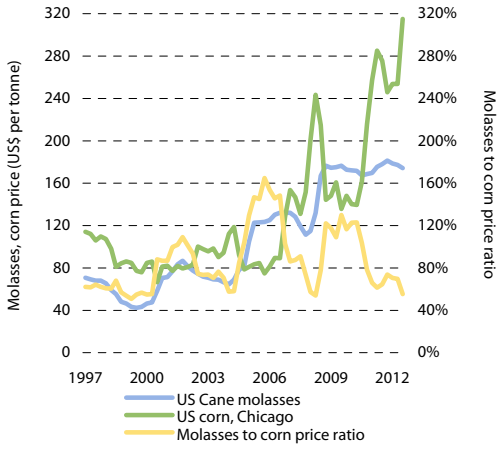
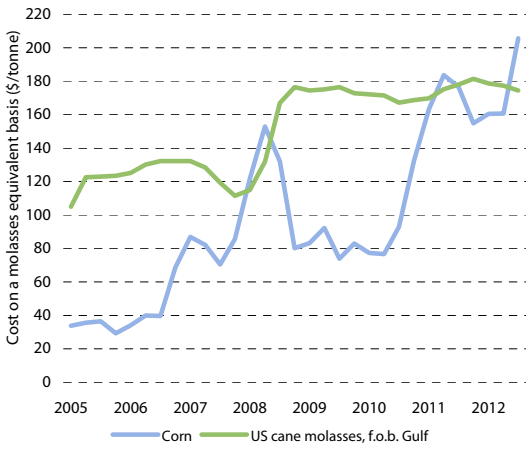


Diagram 3.7: Molasses and corn on an energy equivalent basis



However, if corn prices remain high, there is the potential for molasses prices to rise later in the year. This is demonstrated by Diagram 3.7, which shows that corn is trading around US$30 per tonne above molasses on a US gulf molasses equivalent basis. If this situation persists, this should be supportive for molasses prices later in the year after the glut of beet molasses has been consumed.

Table 3.5: Molasses, corn and barley prices — annual averages and forecasts

	US cane molasses f.o.b. gulf (US$/mt)	US No.2 Maize (Chicago) (US$/tonne)	US Molasses: Maize Price Ratio	% Growth in World Sugar Output	EU Cane Molasses (Amsterdam) (US$/tonne)	EU Feed Barley (Hamburg) (US$/tonne)	EU Molasses: Barley Price Ratio
1997	69.1	110.5	0.63	0.00	92.8	145.8	0.64
1998	57.0	92.9	0.61	2.11	77.8	136.1	0.58
1999	43.8	80.4	0.54	4.10	66.5	130.5	0.51
2000	55.8	79.6	0.70	1.90	77.3	112.9	0.69
2001	79.8	80.5	0.99	3.97	84.3	103.6	0.82
2002	76.3	91.3	0.84	(4.39)	79.4	101.1	0.79
2003	68.9	94.6	0.73	(0.81)	78.4	133.4	0.60
2004	73.4	100.4	0.73	5.56	97.2	148.4	0.67
2005	118.5	81.1	1.46	6.76	135.7	135.8	1.00
2006	129.9	97.1	1.34	1.20	137.8	147.4	0.95
2007	122.7	145.8	0.84	0.48	147.1	258.3	0.60
2008	147.5	200.9	0.73	6.41	194.1	259.5	0.82
2009	174.7	148.2	1.18	(2.11)	206.4	150.8	1.37
2010	169.9	164.3	1.03	0.50	202.0	193.2	1.13
2011	176.2	266.1	0.66	6.91	213.5	277.3	0.77
2012 to date	*177.2*	*265.3*	*0.67*	*5.08*	*191.7*	*280.0*	*0.69*

Beet pulp

Tables 3.6 and 3.7 show our current estimates of beet pulp production and exports by key producers and exporters between 2006/07 and 2011/12. In addition, Table 3.6 also presents our first tentative forecasts for beet pulp production in 2012/13.

In Table 3.6, we show global production of dry, unmolassed beet pulp, in which 1,000kg of beet is assumed to produce approximately 52kg of dry, unmolassed beet pulp. We are estimating global beet pulp production will increase to 13.5 million tonnes in 2011/12, due largely to increased production in the EU and Russia. Looking ahead to 2012/13, we are projecting global production will fall marginally to 12.9 million tonnes, due to slightly lower production in the EU, Russia, and Ukraine.

Table 3.7 shows beet pulp exports from 2006/07-2011/12 along with forecasts for 2012/13. We are anticipating there will be relatively high export availability in 2011/12, with around 475,000 tonnes from the US and just below 170,000 tonnes from the EU. We are projecting export availability to increase marginally in 2012/13 in China and the US, where exports are expected to rise to 180,000 tonnes and 486,000 tonnes, respectively.

Table 3.6: World output of dry, unmolassed beet pulp by country and region ('000 tonnes)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
EU-27	5,736	5,581	4,944	5,475	5,103	5,893	5,400
Turkey	745	639	814	886	900	842	800
Russia	1,601	1,505	1,514	1,299	1,162	2,543	2,600
Ukraine	1,170	886	701	525	718	902	800
Others	461	422	455	436	427	487	500
Europe	**9,714**	**9,034**	**8,428**	**8,622**	**8,309**	**10,666**	**10,100**
Canada	50	45	20	27	30	45	0
US	1,613	1,508	1,273	1,413	1,518	1,366	1,400
North America	**1,663**	**1,552**	**1,293**	**1,440**	**1,548**	**1,411**	**1,400**
Chile	116	67	60	90	116	106	100
South America	**116**	**67**	**60**	**90**	**116**	**106**	**100**
China	540	552	385	259	358	472	500
Others	635	522	382	371	435	504	400
Asia	**1,175**	**1,074**	**767**	**630**	**793**	**976**	**900**
Egypt	235	232	184	284	218	247	200
Morocco	107	106	126	114	111	129	100
Others	0	0	0	0	0	0	100
Africa	**342**	**338**	**310**	**398**	**329**	**376**	**400**
World Total	**13,011**	**12,066**	**10,858**	**11,180**	**11,095**	**13,535**	**12,900**

Table 3.7: Beet pulp exports by key exporters ('000 tonnes)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Europe							
EU-27	97	79	183	157	141	163	149
North/Central America							
US	564	570	537	619	527	475	486
South America							
Chile	50	34	30	26	27	25	23
Asia							
China	297	296	228	104	130	171	181

Diagram 3.8 shows prices of beet pulp in the EU and the US. While EU prices are currently trading above those in the US, EU prices have declined during the past quarter, while those in the US have moved in the opposite direction. As a result, the differential between the two price series has declined from $58/tonne in Q2 2012, to $45/tonne in Q3 2012 to date.

Diagram 3.9 presents the relationship between US beet pulp and corn prices, while Diagram 3.10 shows the evolution of EU beet pulp prices relative to wheat prices. Corn prices in August 2012 to date have soared to over $315/tonne, which have dragged up the price of US beet pulp to $260/tonne, which is very high by historical standards.

Diagram 3.10 shows that there is also a very close relationship between EU pulp and wheat prices. With wheat prices having increased to over $300/tonne during the past month, we

would therefore expect pulp prices to follow suit. Although EU beet pulp prices have remained unchanged during August to date, we anticipate this is a lag and that they will continue to increase in the coming months. Nevertheless, they are still trading at very high levels having been pulled up by rising wheat prices during the previous quarter.

Diagram 3.8: Bulk dried beet pulp prices in the US and EU

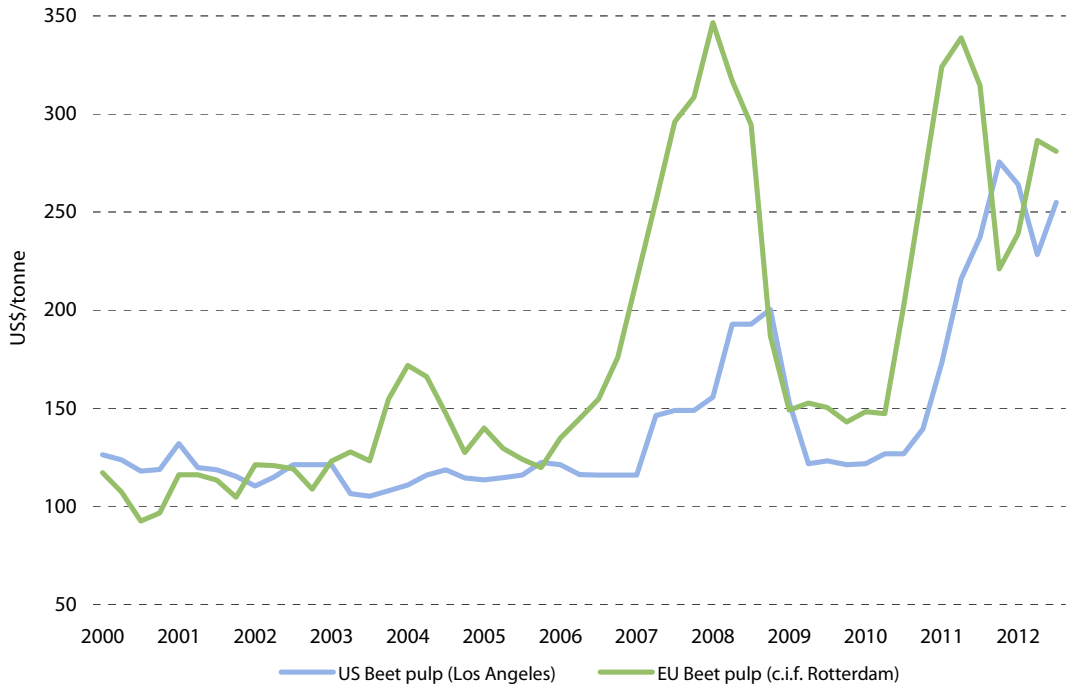


Diagram 3.9: US beet pulp vs. corn

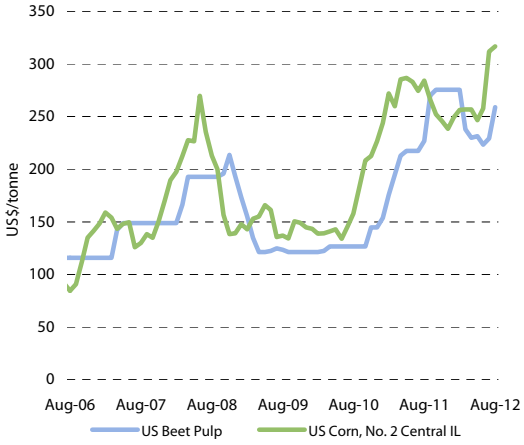
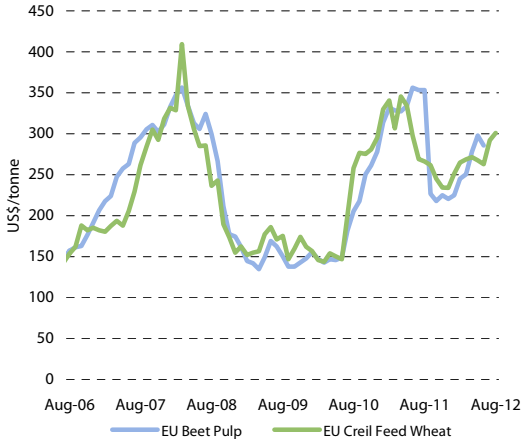


Diagram 3.10: EU beet pulp vs. wheat



By-product credits

Table 3.8 shows our estimates of by-product credits, expressed per tonne of raw sugar, for the US, the EU and Australian sugar industries. By-product credits for bagasse are determined chiefly by the price of oil, as they are based on the theoretical savings made through the use of bagasse as opposed to fuel oil in cane mills. Meanwhile, by-product credits for molasses and beet pulp are determined by the market price of each commodity.

In the EU, a fall in the price of molasses combined with declining beet pulp prices has meant that overall by-product credits fell by 2% during Q3 2012 compared to the previous quarter.

By-product credits in the Australian and US cane sectors were hit by a reduction in the value of credits from bagasse, which fell 5% from the previous quarter. Molasses prices also declined leaving total credits down by around 5% in both industries.

Table 3.8: Estimated by-product credits per tonne of raw sugar produced (US$/tonne)

	By-Product Credits					% Change over
	Average 2009	Average 2010	Average 2011	2012 Q2	2012 Q3	Previous Quarter
US CANE						
Total Credits	**233.8**	**290.2**	**388.0**	**387.3**	**369.6**	**-4.6**
of which:						
Molasses	47.2	45.9	47.6	47.8	47.1	-1.6
Bagasse [1]	186.6	244.3	340.5	339.5	322.6	-5.0
US BEET						
Total Credits	**103.6**	**101.7**	**147.7**	**149.3**	**153.0**	**2.5**
of which:						
Molasses	50.9	49.5	51.4	51.7	51.0	-1.3
Beet Pulp	52.7	52.2	96.3	97.6	102.0	4.4
EU BEET						
Total Credits	**108.6**	**125.9**	**176.5**	**165.7**	**163.3**	**-1.4**
of which:						
Molasses	61.8	60.4	63.8	56.6	55.5	-1.9
Beet Pulp	46.8	65.5	112.7	109.1	107.8	-1.2
AUSTRALIAN CANE						
Total Credits	**283.6**	**360.0**	**490.6**	**489.5**	**466.3**	**-4.7**
of which:						
Molasses	32.8	31.8	33.2	33.4	32.9	-1.5
Bagasse [1]	250.7	328.2	457.5	456.1	433.4	-5.0

Note: 1. Credits to bagasse are measured in terms of the savings of heavy fuel oil, the price of which is presented in the first data column of the table.

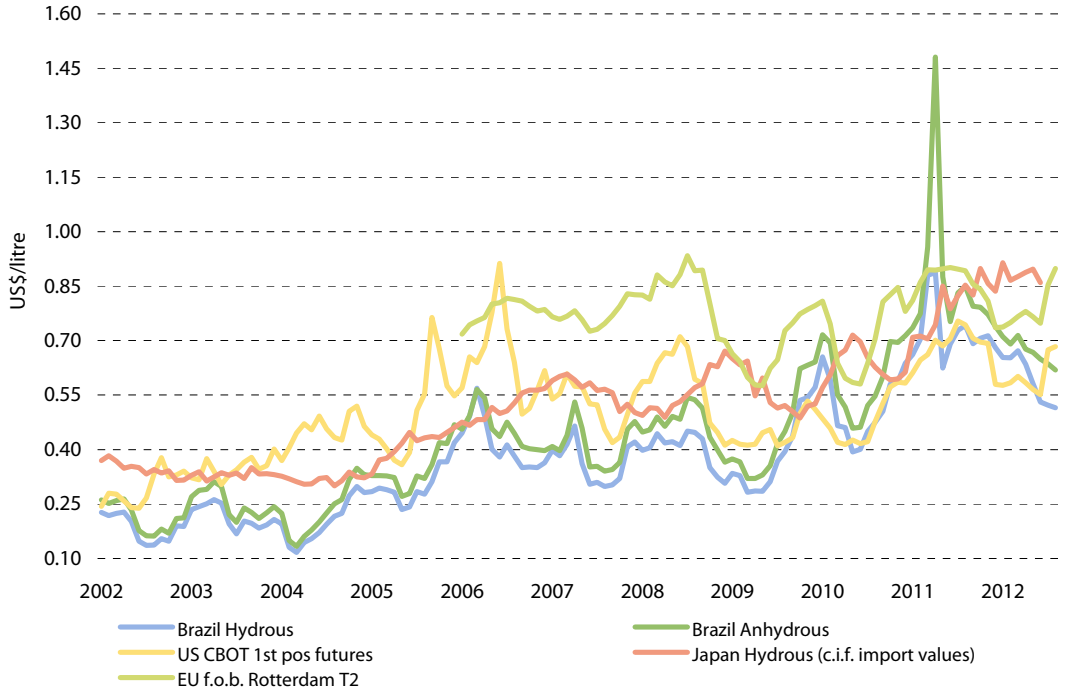
Ethanol

Brazil

As the Centre/South cane crushing campaign has gathered momentum, ethanol prices in Brazil have eased since June. Hydrous and anhydrous prices have averaged US$0.52/litre and US$0.63/litre so far in the third quarter, down 10% and 4%, respectively, from their averages during the second quarter of 2012. In dollar terms, their decline has been made more pronounced by the depreciation of the *Real*. The lower prices have meant that, in July, the price of ethanol in São Paulo was down to 67% of the gasoline price. This is the most competitive hydrous ethanol has been for a year, and should help to boost domestic demand, which had been struggling earlier in the year.

However, considering that it will be difficult for the industry to crush the entire 2012/13 cane crop before the usual end of the season, we expect supplies to remain tight. Furthermore, with mills continuing to maximise sugar, this means that the outlook for ethanol production has fallen to just over 19.2 billion litres.

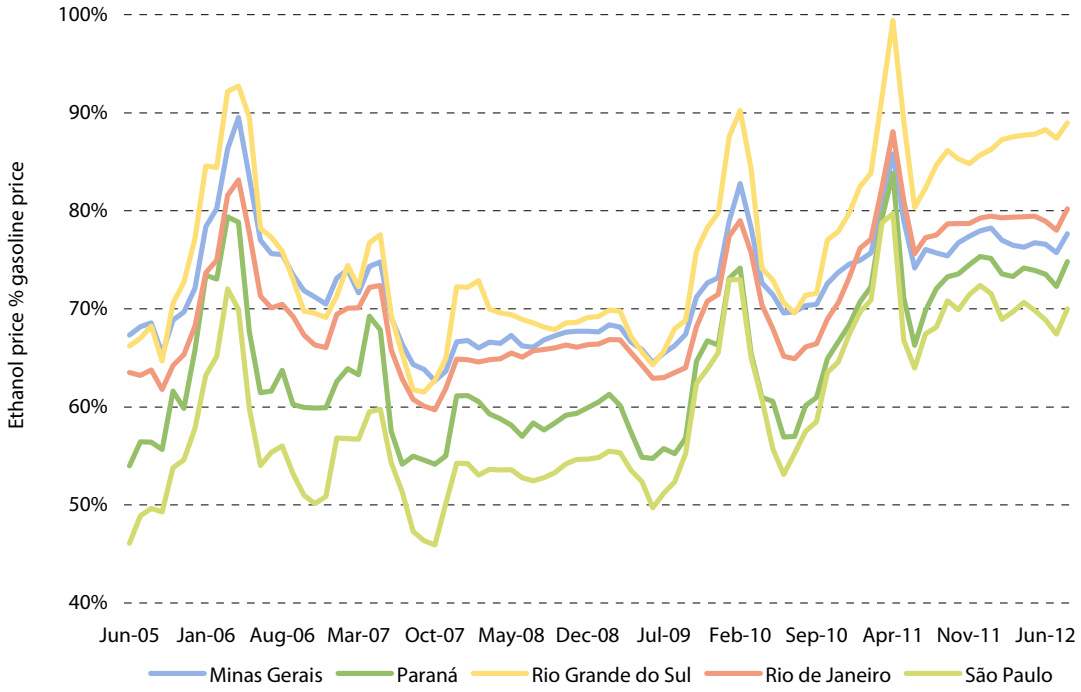
Diagram 3.11: Ethanol prices in the US, EU, Brazil and Japan



Tightness in the domestic market could be exacerbated by the attractiveness of export opportunities. The escalating ethanol prices in the US (which we discuss in more detail below) and EU mean that the attractiveness of supplying the export market has improved. Interestingly, in the EU market, ethanol imports from Brazil are now cheaper than from the US, principally because of the extremely high prices now being seen in the US. Furthermore, in the past, US ethanol held an advantage because it benefited from the blenders' tax credit at home and because the E-90 blend was able to circumvent EU import tariffs. However, the blenders' tax credit expired at the end of 2011 and new EC legislation means that ethanol/gasoline blends of E-70 and above are now subject to the denatured ethanol import tariff of €102/m^3.

On the policy front, Petrobras's mounting financial losses led the Brazilian government to increase the producer price of gasoline A by 7.83% as of June 25th. At the same time, the CIDE tax on gasoline was set at zero. If the CIDE tax were left unchanged, the consumer price would have risen by around 4%. However, the removal of the CIDE tax leaves the consumer price largely unaffected. In addition to the increase in the producer price of Brazilian gasoline, there has been widespread speculation that the government will raise the blend of anhydrous ethanol to 25%. However, the general view is that, if this does happen, it will not occur until later in the year after the municipal elections in October.

Diagram 3.12: Ethanol prices as a percentage of the gasoline price by state



United States

There has been a major reversal in the direction of ethanol prices in the US. During the first half of 2012, ethanol prices had averaged 10-20% lower than their average in 2011. The lower prices reflected the expiry of the US$0.45/gallon blenders' tax credit at the end of 2011, after which blenders bid down the ethanol price to compensate for the loss of the credit. However, since the start of June, ethanol prices have shot up around 28% and have averaged US$0.68/litre so far in the third quarter, similar to the average in 2011.

The major factor behind the price rice has been severe drought, which has devastated the corn crop. Earlier in the year, record areas had led the USDA to forecast a record corn crop. However, persistent dryness in June and a heat wave in July have severely dented estimates for the forthcoming corn harvest. The USDA's July estimate for corn production was reduced by 1.8 billion bushels, to 13.0 billion bushels, from a month earlier. As a result, corn prices have reached record levels. So far in August, nearby CBOT corn futures have averaged US$315/tonne, around 40% higher than in the first week of June. Despite, the rise in ethanol prices, the even greater increase in corn prices has resulted in the further tightening of producers' margins, which had already been low in 2012. Weekly EIA ethanol production data for the first four weeks of July implies July production was well below 1.1 billion gallons. This would represent the lowest monthly figure since February 2011.

Gasoline prices, on the other hand, have averaged around US$0.77/litre so far in the third quarter, slightly lower than their average in the second quarter. This has hurt blenders' margins, reducing incentives for discretionary blending. In fact blenders may seek to fulfil the mandated portion of demand through RIN purchases, especially if they believe that current price relativities are likely to persist. The conventional ethanol RIN price more than doubled in July, suggesting that some market participants have indeed followed this route. Blenders may also seek to take advantage of the 20% rollover cap, which permits up to 20% of this year's mandate to be fulfilled using excess RINs from the previous year.

Table 3.9: US and Brazil ethanol — imports and domestic prices

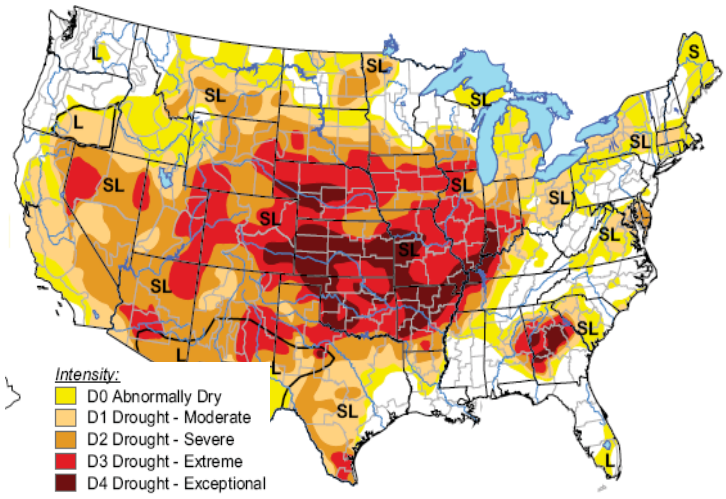
	US CBOT 1st Position [2] Anhydrous (US$/litre)	Japan Hydrous c.i.f (US$/litre)	EU [3] Hydrous (US$/litre)	Brazil Hydrous (US$/litre)	Brazil Anhydrous (US$/litre)
2004.Q1	0.41	0.32	0.45	0.15	0.17
2004.Q2	0.47	0.31	0.44	0.16	0.18
2004.Q3	0.44	0.31	0.43	0.21	0.24
2004.Q4	0.50	0.33	0.43	0.28	0.33
Total 2004	**0.45**	**0.32**	**0.44**	**0.20**	**0.23**
2005.Q1	0.42	0.36	0.44	0.29	0.33
2005.Q2	0.37	0.42	0.45	0.26	0.29
2005.Q3	0.61	0.43	0.48	0.29	0.34
2005.Q4	0.60	0.45	0.53	0.39	0.44
Total 2005	**0.50**	**0.41**	**0.48**	**0.31**	**0.35**
2006.Q1	0.62	0.47	0.56	0.51	0.51
2006.Q2	0.79	0.50	0.59	0.42	0.48
2006.Q3	0.61	0.53	0.53	0.38	0.44
2006.Q4	0.56	0.56	0.56	0.36	0.40
Total 2006	**0.65**	**0.52**	**0.56**	**0.42**	**0.46**
2007.Q1	0.57	0.60	0.53	0.40	0.42
2007.Q2	0.56	0.58	0.50	0.37	0.44
2007.Q3	0.47	0.56	0.49	0.30	0.35
2007.Q4	0.49	0.51	0.46	0.38	0.43
Total 2007	**0.52**	**0.56**	**0.50**	**0.36**	**0.41**
2008.Q1	0.60	0.51	0.44	0.41	0.46
2008.Q2	0.68	0.51	0.42	0.42	0.48
2008.Q3	0.62	0.57	0.47	0.44	0.53
2008.Q4	0.44	0.64	0.54	0.33	0.40
Total 2008	**0.59**	**0.56**	**0.47**	**0.40**	**0.47**
2009.Q1	0.42	0.64	0.51	0.32	0.35
2009.Q2	0.44	0.56	0.47	0.29	0.33
2009.Q3	0.42	0.51	0.43	0.40	0.45
2009.Q4	0.51	0.51	0.42	0.55	0.63
Total 2009	**0.45**	**0.56**	**0.46**	**0.39**	**0.44**
2010.Q1	0.45	0.61	0.46	0.58	0.66
2010.Q2	0.42	0.70	0.49	0.42	0.48
2010.Q3	0.48	0.63	0.50	0.47	0.55
2010.Q4	0.58	0.60	0.49	0.60	0.70
Total 2010	**0.48**	**0.63**	**0.48**	**0.52**	**0.60**
2011.Q1	0.64	0.71	0.53	0.75	0.82
2011.Q2	0.70	0.79	0.54	0.75	1.07
2011.Q3	0.73	0.83	0.56	0.72	0.82
2011.Q4	0.66	0.86	0.59	0.70	0.77
Total 2011	**0.68**	**0.80**	**0.56**	**0.73**	**0.87**
2012.Q1	0.59	0.89	0.61	0.66	0.71
2012.Q2	0.57	0.88	0.61	0.58	0.66
2012.Q3[1]	*0.68*	*n/a*	*0.58*	*0.52*	*0.63*

Notes: 1. Figures in italics are based upon incomplete coverage of the period in question.
2. CBOT first position futures from 2006 Q3. Prior to this Chicago Rack Price.
3. Average of prices from France, Germany and Italy.

Chapter 4: Corn Sweeteners

The United States is facing its worst drought in half a century. Early August rainfalls have meant that the drought may finally be levelling off and, although this provides a better starting point for next year's crop, it is too little too late to help 2012/13 production.

Diagram 4.1: Drought conditions in the US, as of Aug. 14



As of mid-August, 62% of the continental US was mired in a drought with virtually all of the midwest, the center of agricultural output in the country, falling into this category (Diagram 4.1). In Iowa, the leading corn producer in the US, 62% of the state was classified as being under either extreme or exceptional drought, based on a system that takes into account precipiation, soil moisture and heat. In Illinois, the country's second largest corn producer, the situation is even worse, with 80% of the state's area falling into these two worst drought classifications.

While soybean and small grain production will suffer as a result, the drought has been particularly devastating to US corn production, given its timing and corn's greater water needs. In May, when the 2012/13 planting report was first released, the USDA was predicting record corn production in the US thanks to an early spring and projected record high yields, and the largest corn acreage since the late 1930s. Because of the drought, however, what began as projected production of nearly 15 billion bushels has since been revised downward to fewer than 11 billion bushels (Diagram 4.2).

The substantial losses in 2012/13 corn supplies have prompted bullish sentiment to drive prices upwards as the crop has been downgraded over the summer months. In May, when a record crop was anticipated for 2012/13, USDA projected a farmgate price of $4.60 per bushel, a figure that has since been revised upward 80%, to $8.20 per bushel (Diagram 4.2). Higher prices for corn and processed corn products are prompting a rethink about how corn will be consumed in the year ahead. Livestock producers, for example, have begun culling their herds in anticipation of tight grain supplies while also joining a consortium calling for EPA to suspend its corn-based ethanol mandate in 2012/13.

In terms of sweeteners, high corn prices will certainly lead to higher costs for HFCS, which, in light of falling sugar prices, could trigger some soul-searching in markets where US-produced HFCS has made recent inroads. In Mexico, falling sugar prices over the course of 2011/12 have already led to a flattening of HFCS demand, which has translated into stagnant HFCS imports relative to last year.

For 2012/13, a corn price of $8.20 would imply an HFCS-55 production cost in the United States of around 25 cents per pound, dry value when processing cost and by-product credits are taken into account. Meanwhile, falling sugar prices in the world and NAFTA markets could push Mexican HFCS prices into the low 30s in the year ahead. After HFCS transportation costs are taken into account, the prospect of lower Mexican sugar prices means that, for 2012/13, US wet millers will face a challenge to ensure they can meet the discount to sugar required by Mexican end-users while also turning a profit.

Diagram 4.2: WASDE projections of 2012/13 corn production and price

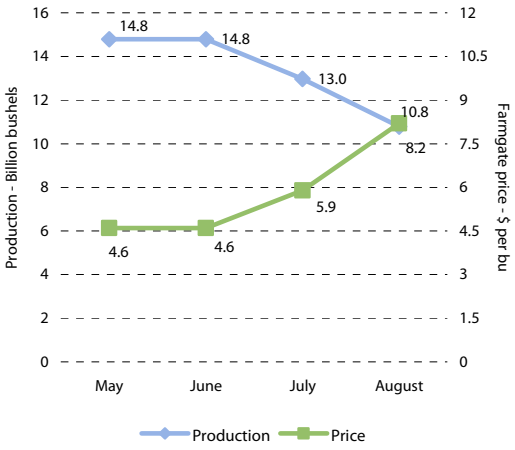


Diagram 4.3: Implications for corn prices on competitiveness of HFCS

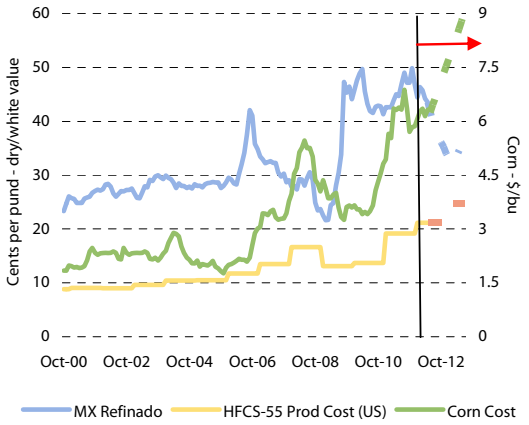


Table 4.1: Summary of world production of HFCS, 2005-2011 (million tonnes, dry basis)

	2005	2006	2007	2008	2009	2010	2011
US	8.4	8.5	8.4	8.2	7.7	8.2	8.2
Canada	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Mexico	0.3	0.5	0.4	0.4	0.2	0.5	0.6
Total North America	**9.1**	**9.4**	**9.3**	**9.1**	**8.4**	**9.2**	**9.3**
China	0.2	0.3	0.6	0.5	0.9	1.1	1.3
Japan	0.9	0.9	0.9	0.9	0.8	0.9	0.9
South Korea	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Taiwan	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Other Asia/Oceania	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total Asia/Oceania	**1.7**	**1.9**	**2.2**	**2.0**	**2.3**	**2.5**	**2.8**
EU-27	0.5	0.6	0.7	0.8	0.7	0.7	0.7
Other Europe	0.2	0.3	0.3	0.3	0.3	0.3	0.3
Total Europe	**0.8**	**0.8**	**1.0**	**1.1**	**1.0**	**1.0**	**1.0**
Argentina	0.3	0.3	0.4	0.4	0.4	0.4	0.3
Other Latin America/Africa	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Latin America/Africa	**0.4**	**0.4**	**0.4**	**0.5**	**0.5**	**0.5**	**0.4**
World Total	**12.0**	**12.5**	**12.8**	**12.6**	**12.1**	**13.2**	**13.5**

Table 4.2: Raw material costs and wholesale list prices of HFCS in the US market (cents/lb. of corn sweetener, dry basis, Mid-West)

	Bulk Beet Sugar [1]	HFCS (55% fructose) [2]	HFCS (42% fructose) [2]	No.2 Yellow Maize	Wet Milling By-Product Credits	Net Cost of Raw Materials	Processing Margin for Wet Miller [3]
2003.Q1	27.19	18.90	16.20	7.30	3.66	3.64	12.56
2003.Q2	27.88	18.90	16.20	7.49	3.59	3.91	12.29
2003.Q3	25.69	18.90	16.20	6.88	3.60	3.27	12.93
2003.Q4	24.13	19.52	16.87	7.18	4.48	2.67	14.20
2003 Average	**26.23**	**19.05**	**16.37**	**7.21**	**3.83**	**3.37**	**12.99**
2004.Q1	23.58	20.52	17.96	8.56	4.82	3.68	14.28
2004.Q2	23.46	20.52	17.96	9.04	4.48	4.55	13.41
2004.Q3	23.50	20.52	17.96	7.03	3.66	3.36	14.60
2004.Q4	23.35	20.59	18.04	5.99	3.27	2.73	15.31
2004 Average	**23.47**	**20.54**	**17.98**	**7.65**	**4.06**	**3.58**	**14.40**
2005.Q1	23.42	21.49	19.01	6.18	3.35	2.84	16.17
2005.Q2	24.73	21.49	19.01	6.37	3.60	2.78	16.23
2005.Q3	31.00	21.49	19.01	6.46	3.72	2.74	16.28
2005.Q4	38.81	20.08	17.55	5.71	3.63	2.08	15.47
2005 Average	**29.49**	**21.14**	**18.65**	**6.18**	**3.57**	**2.61**	**16.04**
2006.Q1	35.88	20.78	18.31	6.21	3.48	2.73	15.58
2006.Q2	35.62	20.78	18.31	6.81	3.33	3.47	14.84
2006.Q3	33.85	20.78	18.31	6.79	3.29	3.49	14.82
2006.Q4	27.52	24.36	22.20	9.78	3.79	6.09	16.10
2006 Average	**33.22**	**21.68**	**19.28**	**7.40**	**3.47**	**3.94**	**15.34**
2007.Q1	25.15	24.51	22.36	11.69	4.52	7.21	15.15
2007.Q2	25.00	24.52	22.36	11.19	4.26	6.95	15.42
2007.Q3	25.46	24.51	22.36	9.98	5.05	4.96	17.40
2007.Q4	24.68	28.13	26.28	11.55	7.27	4.27	22.01
2007 Average	**25.07**	**25.42**	**23.34**	**11.11**	**5.28**	**5.85**	**17.49**
2008.Q1	26.19	28.41	26.58	15.30	8.37	6.85	19.73
2008.Q2	30.23	28.41	26.58	18.56	8.65	9.74	16.85
2008.Q3	38.31	28.41	26.58	16.37	7.53	8.94	17.64
2008.Q4	35.46	31.91	30.38	10.99	5.15	5.88	24.50
2008 Average	**32.55**	**29.28**	**27.53**	**15.31**	**7.43**	**7.85**	**19.68**
2009.Q1	35.00	32.95	31.51	11.30	5.12	6.14	25.37
2009.Q2	34.77	32.95	31.51	12.25	5.24	7.00	24.51
2009.Q3	38.23	32.95	31.51	10.34	5.00	5.33	26.18
2009.Q4	44.08	32.95	31.51	11.29	5.84	5.44	26.07
2009 Average	**38.02**	**32.95**	**31.51**	**11.29**	**5.30**	**5.98**	**25.53**
2010.Q1	51.46	29.61	27.88	10.70	5.84	4.86	23.02
2010.Q2	47.77	26.46	24.47	10.63	4.73	5.88	18.59
2010.Q3	56.31	26.46	24.47	12.32	5.46	6.88	17.59
2010.Q4	56.00	31.86	29.67	16.43	7.24	9.22	20.46
2010 Average	**52.88**	**28.60**	**26.63**	**12.52**	**5.82**	**6.71**	**19.91**
2011.Q1	55.31	32.31	30.11	19.62	8.23	11.48	18.63
2011.Q2	55.38	32.31	30.11	21.74	8.67	13.06	17.04
2011.Q3	56.85	32.31	30.11	21.01	8.57	12.38	17.73
2011.Q4	57.85	32.31	30.11	18.74	7.86	10.84	19.26
2011 Average	**56.35**	**32.31**	**30.11**	**20.28**	**8.33**	**11.94**	**18.16**
2012.Q1	51.31	36.05	32.81	19.34	7.16	12.20	20.61
2012.Q2	47.92	36.20	32.92	19.35	7.63	11.70	21.22
2012.Q3	*42.00*	*36.20*	*32.92*	*23.90*	*9.24*	*14.92*	*18.00*

Notes:
1. The Bulk Sugar Price represents the lower range of actual traded Mid-West values.
2. Actual traded values for HFCS 42% and 55% are frequently considerably below the list price.
3. The Processing Margin is derived by deducting the Net Cost of Raw Materials from the HFCS (42) list price.

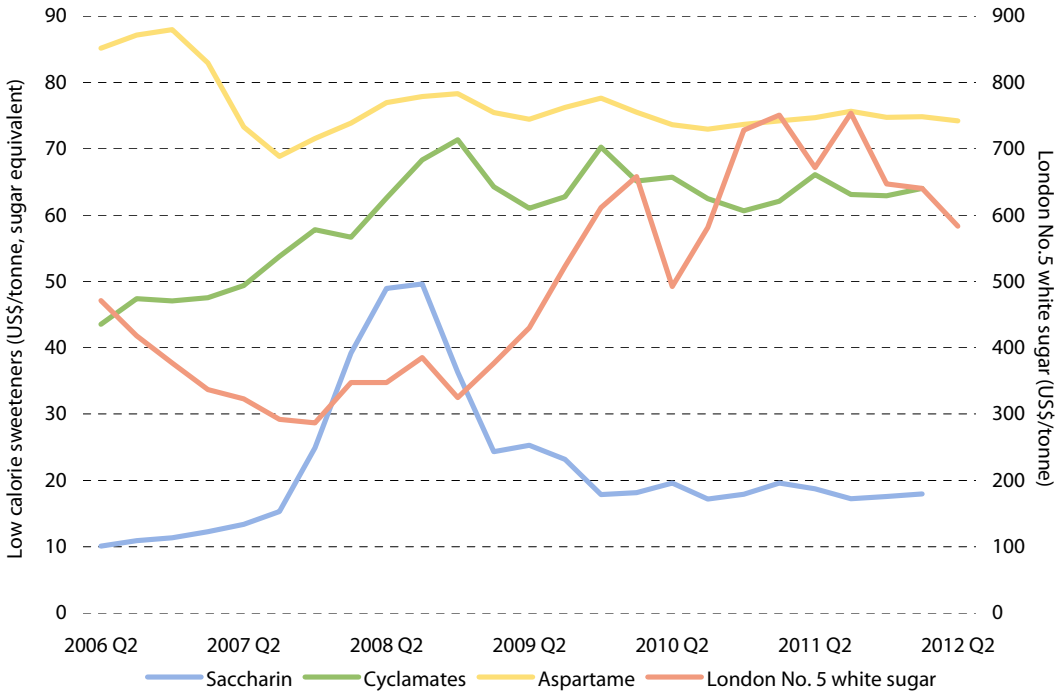
Chapter 5: Low Calorie Sweeteners

The stevia market has seen significant activity in the last six months. *Datamonitor* estimates that, in the first half of 2012, the number of launches of stevia-containing products was over 200, much higher than during the whole of 2011. This news hardly comes as a surprise considering that the EU Commission's approval to the use of steviol glycosides (the sweet compounds in the stevia plant) was only granted in late 2011.

In the EU, a large number of tabletop products containing the high purity stevia extract, Reb-A, (very often in combination with sugar) have been launched since December 2011. In addition, the confectionery and dairy markets have also witnessed significant developments. Key players in the dairy sector such as Danone and Arla have introduced into the markets yogurts and milk-based drinks sweetened with Reb-A and it is likely that more products will follow in the coming months as the European public becomes more familiar with the new sweetener.

As we have discussed in previous issues of the *Sugar Quarterly*, the most interesting developments, however, have probably taken place in the soft drink market. In France, Coca-Cola recently launched reformulated versions of 'regular' Sprite and Nestea. These are now sweetened with a mixture of Reb-A and sugar, and contain 30% less sugar than the standard versions. Meanwhile, product lines continue to be extended with new stevia-containing products. In the UK, for example, Del Monte has recently launched a new range of low calorie (containing 50% less sugar than regular version) fruit juices sweetened with stevia. The brand name of the product range is 'Naturally light', emphasising both the naturalness of the fruit ingredient and of the sweetener.

Diagram 5.1: Aspartame, cyclamate, saccharin prices on a sugar equivalent basis and the world white sugar price



Despite the positive market developments, both PureCircle and GLG Lifetech, the two largest Reb-A producers, continue to underperform. In its latest results update released in July, PureCircle acknowledged that sales in the first six months of 2012 were lower than expected. The main reasons cited for the sluggish performance were a combination of global key

accounts in the beverage sector drawing down their inventories before placing new orders and delayed new product launches. The company expects sales to pick up again in 2013-2014.

GLG Lifetech's shares (listed on both the Toronto and the Nasdaq stock exchanges) are currently suspended from trading on the Toronto stock exchange due to delays by the Company in filing its financial statements.

In other news, earlier in April 2012, the US International Trade Commission (ITC) announced its intention to maintain the anti-dumping duties on Chinese imports of saccharin in place unless an individual Chinese producer applied for separate treatment and could prove that it was eligible for this.

The anti-dumping duties were imposed at the beginning of the last decade following the threat of cheap saccharin imports into the US. Later on, in 2009, the US ITC reviewed the situation to decide whether to renew its five year antidumping duty and whether revocation of the order would lead to the continuation or recurrence of 'material injury' to a domestic industry. At the time, PMC Specialities, a US-based producer of saccharin, was a leading advocate of the duties. In June 2009, the ITC ruled to continue the duties for another five years.

However, PMC subsequently withdrew its complaint on the basis that the anti-dumping duties were being circumvented to benefit other Asian producers 'to the detriment of US customers'. At the time, it was alleged that PMC had ceased all, or virtually all, domestic production of saccharin and was importing large volumes of saccharin from China (one saccharin producer in China was exempt from the punitive anti-dumping duties) and Korea.

Diagram 5.2: Aspartame, cyclamate, saccharin price as a percentage of the world white sugar price

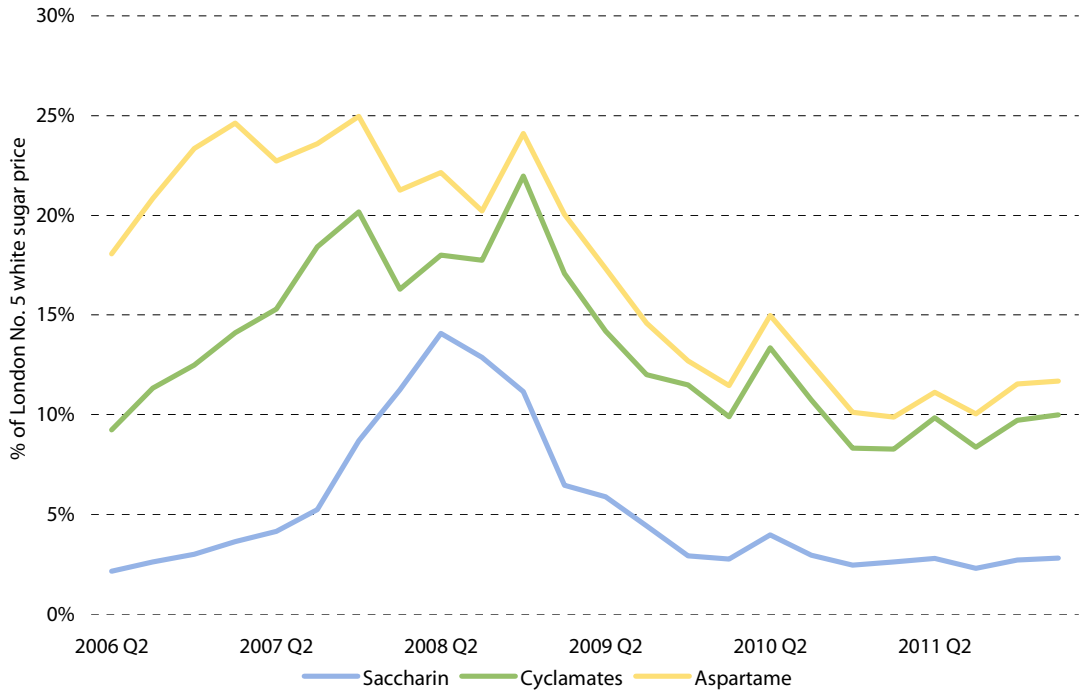


Table 5.1: Trends in free market low calorie sweetener prices

	Aspartame US$/kg	Saccharin US$/kg	Cyclamates US$/kg
2006 Q1	18.2	3.0	1.3
2006 Q2	17.0	3.1	1.4
2006 Q3	17.4	3.2	1.4
2006 Q4	17.6	3.4	1.4
2006 Average	**17.5**	**3.2**	**1.4**
(% Change)	*-11.3%*	*6.5%*	*3.3%*
2007 Q1	16.6	3.7	1.4
2007 Q2	14.7	4.1	1.5
2007 Q3	13.8	5.4	1.6
2007 Q4	14.3	7.9	1.7
2007 Average	**14.5**	**4.9**	**1.6**
(% Change)	*-17.1%*	*55.4%*	*14.5%*
2008 Q1	14.8	11.3	1.8
2008 Q2	15.4	13.8	1.9
2008 Q3	15.6	13.5	2.0
2008 Q4	15.7	11.0	2.0
2008 Average	**15.6**	**13.0**	**1.9**
(% Change)	*7.1%*	*164.3%*	*24.2%*
2009 Q1	15.1	8.6	2.0
2009 Q2	14.9	7.3	1.9
2009 Q3	15.3	6.6	1.9
2009 Q4	15.5	5.9	2.0
2009 Average	**15.2**	**6.8**	**1.9**
(% Change)	*-2.5%*	*-47.9%*	*-0.2%*
2010 Q1	15.1	5.6	2.0
2010 Q2	14.7	5.5	1.9
2010 Q3	14.6	5.5	1.9
2010 Q4	14.8	5.5	1.9
2010 Average	**14.7**	**5.5**	**1.9**
(% Change)	*-3.0%*	*-19.7%*	*-1.7%*
2011 Q1	14.7	5.6	1.9
2011 Q2	14.9	5.6	1.9
2011 Q3	15.1	5.4	1.9
2011 Q4	15.1	5.3	1.9
2011 Average	**15.0**	**5.5**	**1.9**
(% Change)	*1.9%*	*0.4%*	*0.1%*
2012 Q1	14.9	5.3	1.9
2012 Q2	*14.8*	*5.3*	*1.9*

Chapter 6: Sugar Freight

After some recovery in the second quarter, freight rates have been trending downwards since the beginning of the third quarter. This is illustrated by the Baltic Dry Index (BDI), which is currently at a very low level compared to much of the last five years (Diagram 6.1).

A critical source of demand for the freight market is China, particularly its demand for iron ore. China imported 180 million tonnes of iron ore in the second quarter, a similar level to the first quarter and 15% higher than in the same period last year. Moreover, Chinese coal imports were nearly 70% higher than the second quarter in 2011. However, the extra demand from China has not helped to fix the gloomy picture of the global bulk freight market.

The chronically oversupplied nature of the bulk freight market means that the number of scrapped ships continues to show an upward trend. The total scrapped dry bulk carriers amounted to 16.2 million ldt in the first half of 2012, a 25% rise as to the same period in 2011. At the same time, the demand for new ships also declined. According to industry sources, the global handheld new ship orders totalled 96.7 million cgt (4,888 vessels) up to 3rd August, down from over 200 million cgt (11,272 vessels) compared to 2008. This is the first time the orders dropped below the 100 million cgt and 5,000 vessels level since May 2005.

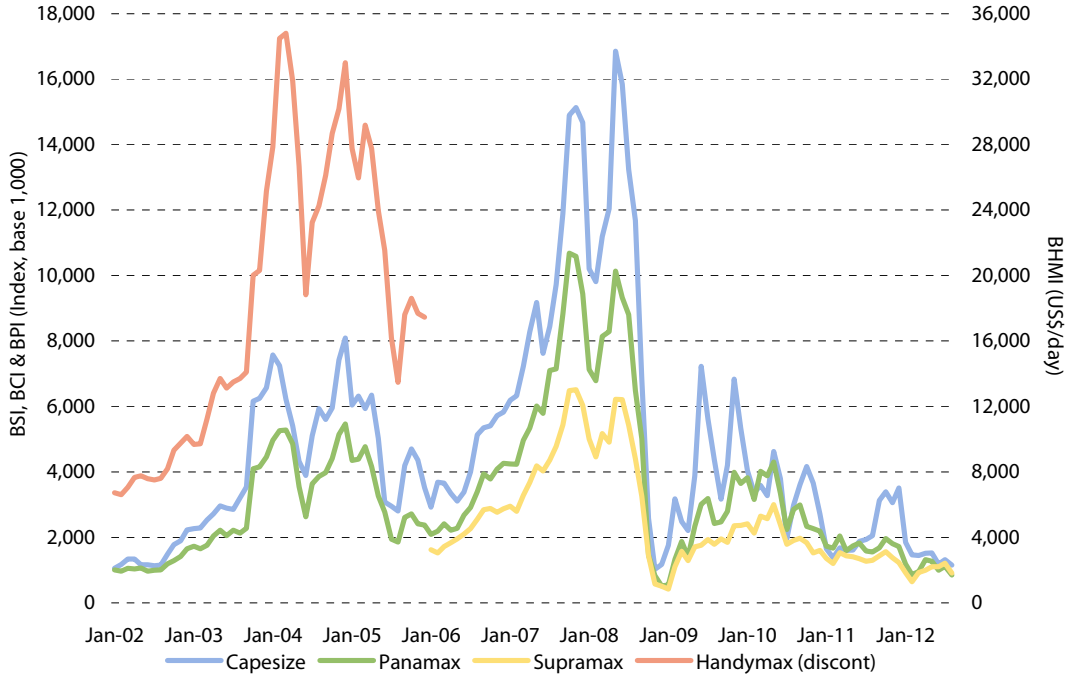
Diagram 6.1: The Baltic Dry Index

Sugar freight rates

Freight rates for bulk sugar have remained fairly flat for most of the period since April. However, in August, rates fell sharply for some routes particularly those originating in Centre/South Brazil. While many vessels made it over to the South American region in the hope of picking up sugar cargoes from Brazil, the constant disruptions to the cane harvest meant that progress was much slower than expected, limiting the availability of sugar for export in May and June. This results too many vessels chasing too few cargoes, leading to falling freight rates. While the pace of the harvest has picked up in July and August, this situation is expected to take some time to resolve itself and it may not be until October before freight rates can recover.

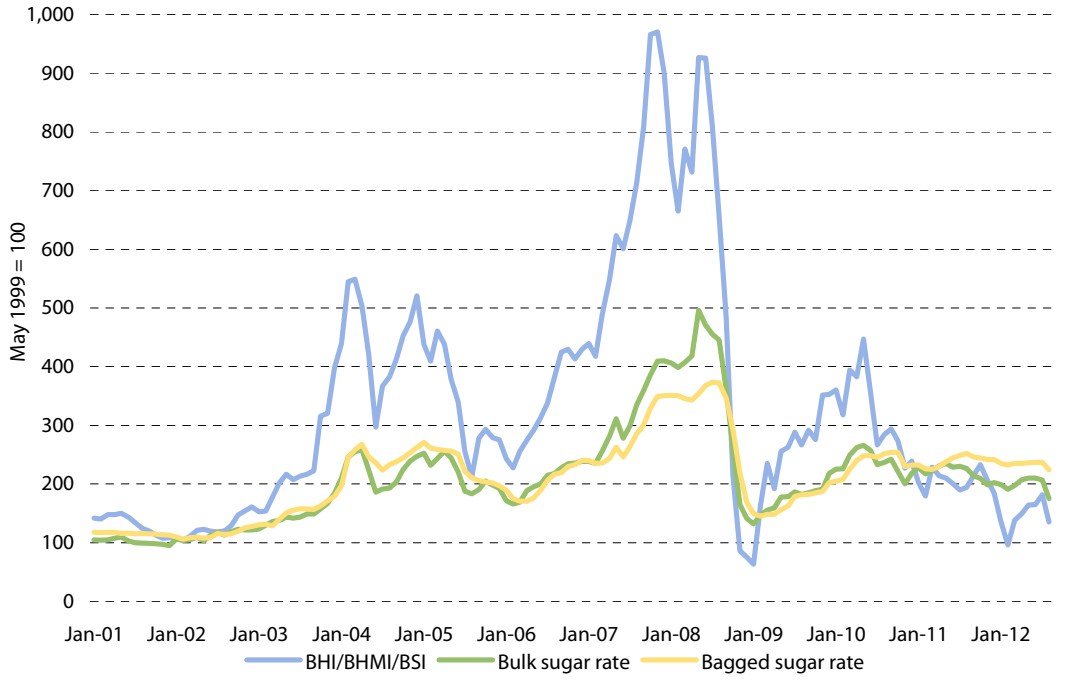
With bulk sugar freight rates declining compared to bagged sugar, the gap between the two has widened over the past few months (Diagram 6.3). This is good news for refiners who have seen their protection from white sugar imports increase.

Diagram 6.2: The BHMI/BHI, BPI, BCI and BSI



Note: The Indices shown in this diagram are the Bulk Handymax Index (BHMI), the Bulk Handysize Index (BHI), the Bulk Supramax Index (BSI), the Bulk Panamax Index (BPI) and the Bulk Capesize Index (BCI). All indices started at 1,000, except for the BCI, which started at 1,002. Starting dates were: BHI 7 January 1997; BPI 6 May 1998; BCI 1 March 1999. The BHMI is quoted from January 2001 and the BSI from January 2006.

Diagram 6.3: LMC bulk and bagged sugar freight indices vs. bulk handymax



Bulk freight rates

Freight rates for major bulk sugar trading routes for the second quarter of the year, as well as average rates during July are presented in Table 6.1.Table 6.4 illustrates the trip charters for tweendeckers and 20,000–30,000 dwt bulk vessels.

For shipments from Brazil, bulk rates showed a sharp decline in August. Shipments to the Persian Gulf are currently around US$35 per tonne, compared to US$45 per tonne in the second quarter. Meanwhile, rates in the eastern hemisphere have again remained stable.

Table 6.1: Single voyage sugar freight rates — bulk cargoes (US$/tonne)

	2012.Q2	2012.Q3	
Origin/Destination	Average	July	August
Centre/South Brazil/Malaysia	51	50	37
Centre/South Brazil/Baltic, Black Sea	43	41	30
Centre/South Brazil/Persian Gulf	45	46	35
Caribbean/US Atlantic	33	34	30
Caribbean/W Europe	57	55	50
Queensland/Far East	30	30	30
Thailand/Far East	33	32	32

Bagged freight rates

Diagram 6.4: LMC single voyage freight rate indices

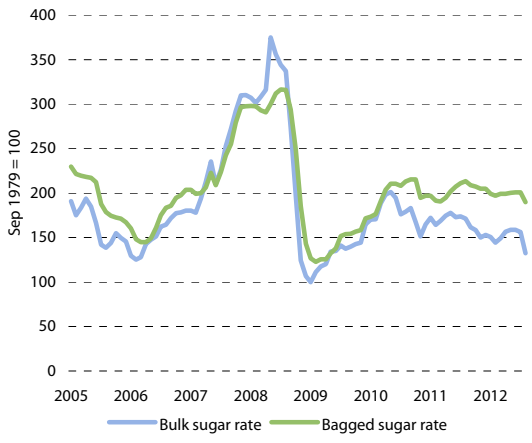


Table 6.2 summarises bagged sugar freight rates for major trading routes from April to August while Diagram 6.4 presents LMC's indices for bulk and bagged sugar rates.

Rates for bagged sugar dropped slightly in August as compared to the average rate in the second quarter. The decline in rates has been most noticeable in the western hemisphere with rates originating from Thailand remaining fairly flat.

Table 6.2: Single voyage sugar freight rates — bagged cargoes (US$/tonne)

	2012.Q2	2012.Q3	
Origin/Destination	Average	July	August
S. America/Mediterranean	75	75	70
S. America/West Africa	52	58	50
North France/Mediterranean	65	65	60
North France/West Africa	65	65	60
North France/Red Sea, Persian Gulf	85	85	80
Thailand/Far East	30	30	30
Thailand/Red Sea, Persian Gulf	54	50	55

Table 6.3: Single voyage sugar freight rates for bagged and bulk cargoes

	London Committee Caribbean-London freight adjustment[1] (US$/tonne)	LMC Index for Bulk Sugar Cargoes	LMC Index for Bagged Sugar Cargoes
2001.Q1	24.50	79.0	99.6
2001.Q2	24.33	80.6	98.9
2001.Q3	24.00	75.0	97.7
2001.Q4	24.00	73.0	96.3
2002.Q1	24.00	79.4	91.5
2002.Q2	24.00	81.8	91.9
2002.Q3	24.00	87.9	97.4
2002.Q4	24.67	92.3	105.4
2003.Q1	27.33	97.9	110.5
2003.Q2	32.94	106.5	126.0
2003.Q3	35.00	111.2	133.4
2003.Q4	38.28	128.2	144.9
2004.Q1	54.60	179.1	198.1
2004.Q2	56.86	168.4	212.0
2004.Q3	52.14	147.9	196.2
2004.Q4	60.95	179.1	214.8
2005 Q1	67.00	183.3	223.6
2005.Q2	63.48	181.7	215.9
2005.Q3	52.12	141.5	180.3
2005.Q4	52.33	150.1	170.3
2006.Q1	44.87	127.6	151.2
2006.Q2	42.00	147.1	151.7
2006.Q3	49.50	166.2	181.4
2006.Q4	54.00	178.6	198.6
2007.Q1	55.50	183.9	200.9
2007.Q2	57.50	219.5	212.6
2007.Q3	65.00	250.4	240.5
2007.Q4	81.25	303.8	291.0
2008.Q1	83.75	305.5	296.1
2008.Q2	100.00	349.0	301.0
2008.Q3	95.00	318.3	308.8
2008.Q4	45.00	142.7	192.3
2009.Q1	32.50	109.5	125.1
2009.Q2	38.75	129.9	132.0
2009.Q3	41.25	139.5	153.2
2009.Q4	40.00	150.5	162.3
2010.Q1	43.75	176.5	180.3
2010.Q2	55.00	198.0	208.3
2010.Q3	48.75	179.4	212.2
2010.Q4	40.00	161.1	202.3
2011.Q1	45.00	168.4	192.9
2011.Q2	46.00	175.0	201.2
2011.Q3	42.50	168.9	211.1
2011.Q4	40.00	153.7	205.8
2012.Q1	41.25	147.9	198.6
2012.Q2	42.75	158.1	200.1
2012.Q3 to date August	*39.38*	*144.1*	*195.4*

Note: 1. This adjustment was officially discontinued in mid 2006. In order to continue the sequence, we have linked the series to the change in reported freight rates from Guyana to London.

Table 6.4: Trip charter rates for tweendeckers and 20-30,000 dwt bulker

	London Committee Caribbean-London freight adjustment[1] (US$/tonne)	LMC Average for 20-30,000 dwt Bulkers (US$/day)	LMC Average for Tweendeckers (US$/day)
2001.Q1	24.50	7,160	5,166
2001.Q2	24.33	7,404	5,068
2001.Q3	24.00	6,854	4,629
2001.Q4	24.00	6,146	4,444
2002.Q1	24.00	6,309	4,444
2002.Q2	24.00	6,725	5,212
2002.Q3	24.00	6,859	5,684
2002.Q4	24.67	7,414	5,721
2003.Q1	27.33	7,858	5,934
2003.Q2	32.94	8,215	6,507
2003.Q3	35.00	8,686	6,661
2003.Q4	38.28	11,861	6,984
2004.Q1	54.60	19,032	9,384
2004.Q2	56.86	15,190	10,043
2004.Q3	52.14	15,882	9,295
2004.Q4	60.95	19,943	10,176
2005 Q1	67.00	20,479	10,591
2005.Q2	63.48	17,889	10,228
2005.Q3	52.12	13,582	8,540
2005.Q4	52.33	12,912	8,066
2006.Q1	44.87	11,250	7,162
2006.Q2	42.00	12,941	7,184
2006.Q3	49.50	16,599	8,591
2006.Q4	54.00	18,581	9,406
2007.Q1	55.50	19,880	9,517
2007.Q2	57.50	23,690	10,073
2007.Q3	65.00	29,974	11,391
2007.Q4	81.25	40,089	13,783
2008.Q1	83.75	35,863	14,028
2008.Q2	100.00	39,364	14,257
2008.Q3	95.00	34,488	14,628
2008.Q4	45.00	9,415	9,110
2009.Q1	32.50	8,736	5,925
2009.Q2	38.75	10,347	6,251
2009.Q3	41.25	11,440	7,258
2009.Q4	40.00	12,908	7,688
2010.Q1	43.75	15,612	8,540
2010.Q2	55.00	17,911	9,865
2010.Q3	48.75	15,587	10,051
2010.Q4	40.00	14,502	9,584
2011.Q1	45.00	12,275	9,140
2011.Q2	46.00	12,583	9,532
2011.Q3	42.50	11,431	9,999
2011.Q4	40.00	10,693	9,747
2012.Q1	41.25	8,761	9,406
2012.Q2	42.75	9,361	9,480
2012.Q3 to date August	*39.38*	*8,537*	*9,254*

Note: 1. This adjustment was officially discontinued in mid 2006. In order to continue the sequence, we have linked the series to the change in reported freight rates from Guyana to London.