Modelling the Impacts of Sugar Quota Options in the CAP post-2013

Key Points

1. This note sets out the projected impacts on European sugar markets of options for the EU sugar regime. In particular, the note concentrates on the impacts of extending the sugar quota regime[1] and import provisions.

2. Extending the sugar quota regime beyond 2015 is projected to lead to European sugar production being 4%-6% lower than it would otherwise have been, and raise EU sugar prices by 6%-28%, relative to a scenario in which quotas expire. The results depend crucially on the level of EU sugar imports.

3. The impact of the quota regime itself on European prices is modest compared to the impact of EU imports. Since the last sugar reform, EU imports have remained significantly below Commission estimates of around 3.5 million tonnes (MT) published at the time of the reforms. Importantly, the quota regime exacerbates the impact on prices from a lower level of EU imports because sugar production in the EU cannot respond to the higher domestic sugar price brought about by lower imports.

4. If quotas are extended, adverse price impacts can nevertheless be significantly mitigated by allowing imports to reach the levels forecasted at the time of the last reform.

5. In any event, *prior to quota expiry in 2015*, the current shortage in EU sugar imports is projected to lead to EU domestic sugar prices being on average 35% higher than would otherwise be the case.

6. This analysis does not address the economic costs of disruption to food and drink manufacturing, or production relocation, in response to insecure supplies of sugar as an ingredient. This issue would benefit from further analysis.

Modelling Exercise

7. The model we have used is the 2012 version of the OECD-FAO Aglink-Cosimo model. The 2012 version is the latest available – published in July 2012 – and contains updated projections for global agricultural commodity prices, including raw and white sugar.

[1] This note makes no attempt to assess changes in the Isoglucose market in any of the scenarios considered. Latest OECD-FAO baseline projections for the Isoglucose market are used throughout. In the baseline scenario i.e. sugar quota expiry in 2015, EU production of isoglucose rises from 690,000 tonnes to 845,000 tonnes in 2021.

8. The model projects annual production, consumption, prices and trade for all major agricultural commodities and regions from 2012-2021. As regards the EU sugar regime, quotas expire in 2015 in the model's baseline or reference scenario[2].

9. The Commission used an older version (2010) of the same model in their initial Impact Assessment of the CAP post-2013 proposals regarding the sugar regime. As such, they were unable to incorporate the latest developments in both agricultural commodity prices on world markets and in the EU trade balance (particularly regarding the low level of sugar imports).

10. The following scenarios were run through the model:

Scenario 1: Projected impacts of extending sugar quotas[3] and achieving the level of sugar imports assumed by the Commission at the time of the last reforms ('Commission Import Assumptions' in the following table).

Scenario 2: Projected impacts of extending sugar quotas and assuming import levels from ACP/LDC countries remain as experienced in recent years (1.8 MT). ('Actual Import Levels' in the following table).

Scenario 3: Projected impacts of extending sugar quotas and assuming reduced import levels from ACP/LDC countries (1.1MT). ('Reduced Import Levels' in the following table).

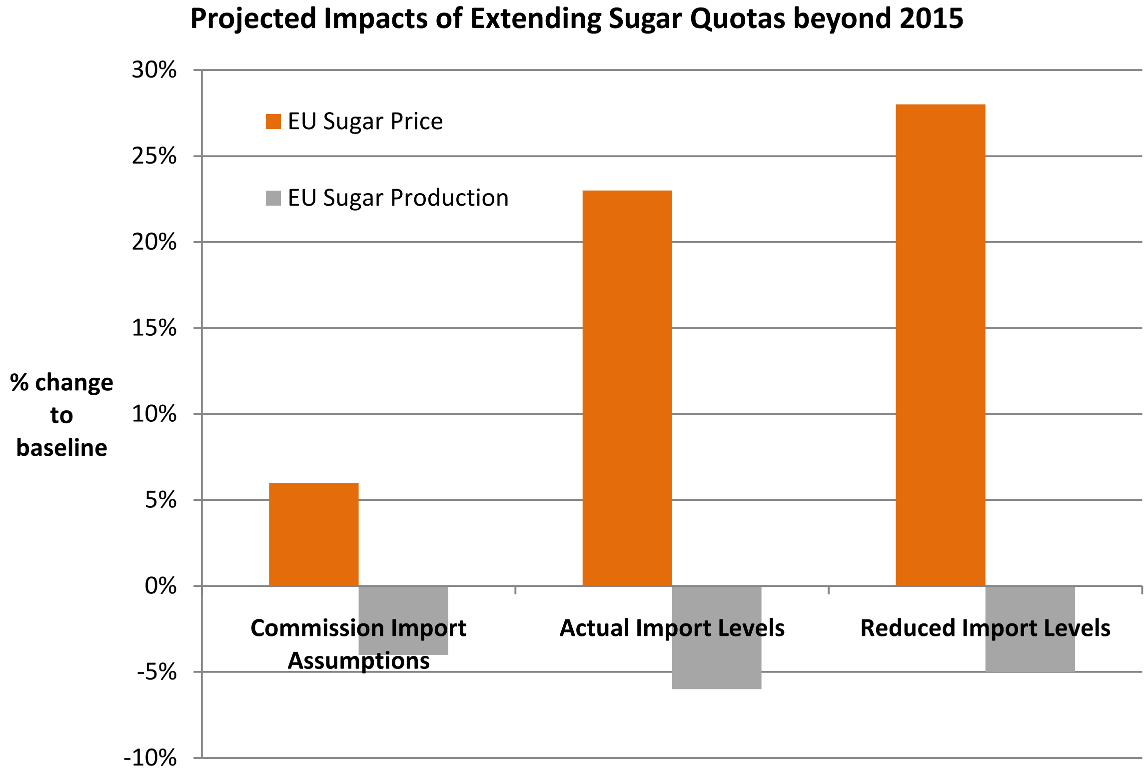
Results

11. Results of each scenario are presented in the following table and chart.

	Scenario 1: Commission Import Assumptions			**Scenario 2: Actual Import Levels**			**Scenario 3: Reduced Import Levels**		
All Values in 2021	**Quotas Abolished in 2015**	**Quotas Maintained**	**% change**	**Quotas Abolished in 2015**	**Quotas Maintained**	**% change**	**Quotas Abolished in 2015**	**Quotas Maintained**	**% change**
EU Sugar Production ('000 MT)	16138	15469	-4%	16875	15922	-6%	17445	16493	-5%
EU White Sugar Price (€/MT)	418	445	6%	440	542	23%	460	589	28%

[2] When quotas expire in the model's baseline, EU exports of sugar are able to rise, increasing by 25% to 2021.

[3] Extending sugar quotas refers to a scenario in which sugar quotas are maintained to 2021 in the model.



12. If sugar imports were to increase to the levels envisaged at the time of the last reform, extending the quota beyond 2015 has a relatively modest impact. Nevertheless, by 2021, EU sugar production is 4% below the baseline scenario in which quotas expire in 2015. Consequently, EU sugar prices are projected to be 6% above baseline levels where quotas are abolished.

13. Since the last reform, sugar imports have remained well-below the levels initially forecast by the Commission and contained within our model's baseline. A scenario was therefore run to reflect the historical reality of lower-than-expected import volumes. In this scenario we hold imports at the current level of 1.8 MT from ACP/LDC countries over the course of the projection period.

14. Under the conditions set out in para (10), maintaining the quota regime beyond 2015 has a much greater impact; EU sugar production is projected 6% below the baseline scenario by 2021 and EU sugar prices are 23% higher than in the baseline scenario. This is because the quota prevents domestic EU sugar production from expanding in response to higher EU sugar prices, themselves brought about by a restricted level of imports.

15. A third scenario was run in the model to simulate the impact of EU sugar imports below the levels seen recently. This could occur were there to be a reduction in sugar refining capacity within the EU. We therefore reduce sugar imports to 1.1 MT (or 700,000 tonnes below the recently achieved levels) in this scenario.

Extending the quota regime beyond 2015 in this scenario is projected to raise EU sugar prices by 28% above levels they would be were the quota to be abolished.

16. In summary, extending the sugar quota regime will exert upward pressure on EU sugar prices. The modelling results suggest that unless imports are allowed to meet previously forecasted levels, maintaining the EU sugar quota will exert far greater upward pressure on EU sugar prices than would otherwise be the case - at the detriment of both industrial users and consumers.

17. If quotas are extended beyond 2015, then in order to mitigate or minimize the impact on prices and industrial users/consumers, adequate supplies need to be available on the EU market. This means that sugar imports would need to rise to (at least) the levels anticipated at the time of the last reform.

18. In any event, *prior to quota expiry*, the current shortfall in EU sugar imports is likely to be pushing domestic sugar prices up within the EU. In order to look into this we ran three scenarios related to the period before quota expiry in the model (2015).

19. The first scenario assumes EU sugar imports as envisaged by the Commission in their latest baseline. The second scenario, termed ‘actual import levels’ refers to a scenario in which EU sugar imports are held at 1.8 MT from ACP/LDC countries. The third scenario of ‘reduced import levels’ represents a situation in which sugar imports fall further from currently levels to 1.1 MT. The results are given in the following table.

	E27 White Sugar Price (€/tonne)			
	2012	**2013**	**2014**	
Commission Imports (Scenario 1)	465	442	442	
Actual Import Levels (Scenario 2)	649	622	555	
Reduced Import Levels (Scenario 3)	781	743	612	**Average % diff**
% diff Scenario 1 and 2	**40%**	**41%**	**26%**	**35%**
% diff Scenario 1 and 3	**68%**	**68%**	**38%**	**58%**

20. Therefore, in the next few years and even before end of the quota regime, the shortfall in sugar imports is projected to lead to EU domestic sugar prices being on average 35% higher than would otherwise be the case. If imports drop even further below the historic trend, then sugar prices are projected 58% higher.