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CHEAPER RAW MATERIALS FOR EUROPE'S INDUSTRIES: SUGAR AND STARCH

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CHEAPER RAW MATERIALS FOR EUROPE'S INDUSTRIES: SUGAR AND STARCH

Author: M. W. FLOYD

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CHEAPER RAW MATERIALS FOR EUROPE'S INDUSTRIES : SUGAR AND STARCH

On 25 March 1986 the Council adopted new legislation which has the effect of giving certain European industries access to these raw materials at prices near to the world market prices. The effect of the new legislation is to provide farmers with an expanded market and to enable new industrial developments to go ahead with indigenous supplies of raw materials at competitive prices.

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I. BACKGROUND

(a) In brief

The prices at which Community farmers can sell their products are managed in various ways which protect the farmers against catastrophic loss of revenue when world market prices, of sugar for example, crash (as in 1982). The consequence of making these arrangements can be that the users of the farmers' produce feel that they are paying "too much" for it, from their point of view. Rather than have them pass this on to the consumer, the Community looks for ways to compensate them.

There are two ways for the Community to do something to help these users of starch and sugar. Firstly, the Community can, within reason, impose import levies on competing products which enter Europe and also give export assistance when the European users want to sell their finished products outside the Community. These types of frontier assistance are clearly a big help to the starch and sugar users. Secondly, the Community can help in a more direct way by giving the users of starch and sugar cash grants linked to the quantities that they use. In actual fact, the Community uses both these ways and has done so for many years.

These benefits very rarely applied fully, however, to the manufacturers of non-food products made with sugar or starch. Consequently, non-food uses of sugar and starch within the Community were being relatively less well favoured when compared with the food uses under the existing system. With the advent of biotechnological processes, which can make very valuable non-food products from starch and sugar, and which are seen as important for future economic development in Europe, it was time to do something for the benefit of the non-food uses.

It was also argued that since new biotechnology companies are free to set themselves up anywhere they please, they would be unlikely to choose Europe, with the high prices, because here they would be paying a great deal more for their raw materials than their competitors in other places. On this basis, the Community had another reason to allocate more resources for the benefit of the non-food uses of sugar and starch.

(b) The case for starch

Latterly, the aid that was paid to producers of starch used to compensate them for very little of the difference between the prices of the raw materials available on the world market and the prices expected inside Europe. One might think that the money not being spent on them was actually money saved. But the situation was not as simple as that: the Community has to pay to subsidize the export of agricultural raw materials that can be used for starch making, otherwise they would not sell on the world market. Neighbouring countries could then make non-food starch products with this good cheap raw material, and sell them back into the Community. Because their raw material costs, at world market prices, were lower than those prevailing inside the Community, they could do this competitively and, thanks to agreements under GATT, without fear of restraint. The thought that the Community would actually be paying out export subsidies, and by so doing put others into this position, was not a happy one. With inadequate compensatory aid the European manufacturers could not out-compete them.

There were other pressing reasons to make the starch aid system more comprehensive. A lot of starch is used in paper and board making, in fact, over 800.000 tonnes a year. This represents about one fifth of annual Community starch production. Depending on developments in the paper industry, this important market could grow. Table 1 shows other interesting future market possibilities.

(c) The case for sugar

The economic arguments for selective benefits to non-food uses of sugar were similarly strong: the production aid compensated for even less of the gap between the Community sugar price and that prevailing on the world market. Clearly, there was a great incentive to use anything that would substitute for sugar if you could, and substitutes were available.

Molasses, an extremely cheap source of carbohydrate, can be imported into the Community without currently paying import levies. A reduced use of molasses would reduce an environmental problem; processes which use molasses are by their nature much more polluting. Also, any way of increasing intra-Community consumption would be particularly helpful to the farmers and sugar producers because, according to the design of the regime in this sector, it is ultimately they alone who have to pay the costs of subsidizing exports, and not general Community funds. Glucose would also substitute for sugar as the feedstock for fermentation processes.

Table 1

Current and future demand of starch-based products
in the EEC chemical industry

(in '000 tonnes)

Market	Current demand 1983	Estimated demand in the year 2000		
		Existing technologies		New technologies
		Current market regulation	World market conditions	World market conditions
Fermentation*	260	310	550	650
Other chemical markets** (pharma., cosmet., etc.)	125	180	260	300
Plastic industry***	15	30	180	700 (*)
TOTAL	400	520	990	1.650

* C.G.R. = 5% p.a.
** C.G.R. = 4% p.a.
*** C.G.R. = 2% p.a.
(*) Total long-term potential.

Source: CEFIC document dated March 1985:
"Use of agricultural raw materials in the European chemical industry".

The use of sugars as feedstocks for fermentation processes is central to the prospect of developing biotechnology-based businesses in Europe. For some products, the decision as to whether or not to use sugar as the raw material depends on the price of oil, because petrochemicals are alternative raw materials. With the recent fall in the price of oil, the importance of doing something to maintain the agricultural feedstock's relative position became even more acute.

The importance of the main uses and the entirely new products for sugar is illustrated in Table 2, which shows industry's estimates of the increases to be expected in Community sugar consumption if it were available on the same terms as elsewhere.

Table 2

Industry estimate of the tonnage of sugar that could be used in Europe, given competitive prices

Product	tonnes/year of sugar 2000
Itaconic acid	8,000
Lactic acid	10,000
Citric acid	150,000
Levulose	14,000
Penicillin	40,000
Antibiotics	8,000
Sucroglycerides	3,000
Cores and binders	4,000
Aminoplastics	1,000
Heteroplysaccharides	1,700
Other small volume chemicals	100,000
Entirely new products	200,000
	539,700

This estimated total of over half a million tonnes of sugar compares with a current use of about one eighth of that figure. In view of the recent fall in oil prices, the 200,000 tonne figure for new products might have to be revised because it contains such products as polyhydroxybutarate biodegradable plastic which, although highly desirable in every respect, would be difficult to produce profitably in the face of competition from cheaper traditional plastics.

II. HOW THE SYSTEM WORKS

(a) Application

Essentially, the new system compensates for the difference between Community and world market prices of sugar or starch by making payments to manufacturers who use such materials for producing certain goods which are not protected by import levies. The pre-existing aid system, which in the case of starch also allowed payments in respect of protected products, will eventually stop.

The legislation to be applied was enacted in two steps. First, the Council of the European Communities adopted the principles of the new system. This was done in March 1986 and the legal texts were published in the Official Journal of the European Communities at the beginning of April 1986. In these texts, the Council left it to the Commission to decide on the detailed Regulations necessary to put the Council's Regulations into practice. The Commission published these latter, more detailed, Regulations in July 1986. They took effect as from 1 July, the beginning of the "marketing year".

(b) For starch use

The principles of the new arrangements are set out in Council Regulation No (EEC) No 1009/86 (1). This explains, firstly, that users of starch extracted from wheat, maize, rice, broken rice or potatoes, can obtain "production refunds" if they use these materials or certain derived products to make any of the items listed in Table 3, which follows the nomenclature of the Community's Common Customs Tariff.

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(1) The Official Journal of the European Communities, Volume 29, No L 94 of 9 April 1986. The same issue contains three other Regulations concerning starch, but their purpose is only to prepare the legal ground for 1009/86 by amending the pre-existing legislation and to adjust those rules which specifically concern potato starch.

Table 3

The products whose manufacture will attract aid
for the use of starch

CCT Heading	Description
ex 13.03 C III	Carrageenan
ex 15.11 B	Glycerol, other than crude
Chapter 29 (but excluding 29.04 C II and 29.04 C III	Organic chemicals
Chapter 30	Pharmaceuticals
34.02	Organic surfactants, surfactant preparations, and washing preparations (with or without soap)
Chapter 35 (but excluding 35.01 and 35.05)	Albuminoidal substances, glues, enzymes
Chapter 38 (but excluding 38.12 A and 38.19 T)	Miscellaneous chemical products
Chapter 39	Artificial resins and plastic materials etc.
48.01, 48.03, 48.04, 48.05 48.07, 48.08	Paper and paperboard in rolls or sheets
48.11	Wallpaper and lincrusta; window transparencies of paper
Chapter 55	Cotton

A more exhaustively detailed list could have been drawn up, but the problem with that would have been that companies with new secret products under development would have been reluctant to have them put on the list for all to see. It will be possible to change this list if technological developments or other factors really require it.

The amount of the refund to be paid depends on quite a number of things and so it is fixed every three months after consulting a "management committee" meeting in Brussels. This is quite a normal procedure and has been used for many agricultural price fixing mechanisms. The "management committee" has the specific duty to make sure that the suggested rate fulfils the objective of making the starch available under similar conditions to those prevailing outside Europe. The Commission's Regulation (2) tells the committee what data to use in this refund-fixing calculation. As an example, Table 4 shows how this was done for the period July to September 1986. It would not have been possible to pay for complete price compensation from the very beginning; a transitional period was needed. So for the first year, that is to say until July 1987, the Council's Decision was that only half of the price differential should be compensated. The effect of this is seen in Table 4 (step E of the calculation). Also, bringing an abrupt end to the pre-existing system was thought to be inadvisable, and so it will fall out of use by stages, as shown in Table 5.

If it appears that the application of the new system causes any distortion of competition, then the "management committee" has the possibility of suggesting a reduction of the offending aid. It is unlikely that the distortion would be avoided by increasing any aid because, since the aid theoretically compensates the difference between the Community prices and world prices, an increase in aid would be tantamount to providing starch at below world prices, which is unacceptable under GATT.

It is also worth noting that the Commission Regulation gives a list of intermediate products derived from starch, and whose use can also create a right to benefit from the production aid system. They include, for example, glucose syrups.

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(2) Regulation (EEC) No 2169/86: OJ No L 189 of 11.7.1986, p. 12.

Table 4

The calculation used to decide on the amount of the refund
(example for maize)

Relevant period: July to September 1986 inclusive	ECU/tonne
A. take the maize intervention price for the first month of the quarter for which the refund is to be fixed: for July 1986 this was	179.44
B. calculate the weighted average prices of c.i.f. maize recently recorded (about the first 10 weeks of the preceding quarter)	97.14
C. take the difference A - B	82.30
D. subtract the refund that still applies under the pre-existing system (Table 5)	- 15.00
	= 67.30
E. take half of this figure D and then multiply it by a coefficient of 1.6. This gives the amount of the refund :	53.84

Refer to the text for an explanation of step E (page 7, paragraphs 2 and 3). For the wheat, rice and potato starch refund calculations, step D is the only source of any differences. Potato starch is treated in the same way as maize starch.

Table 5

These figures show the reducing contributions to be paid according to the pre-existing system in ECU per tonne of raw material used. This table also shows how the production aid varies according to the raw material being used. For illustrative purposes, the new additional aid (as decided by the management committee in June 1986, see Table 4) is included in brackets. Remember that this new aid is paid per tonne of starch produced.

Marketing year (July to June)	1986/87	1987/88	1988/89	1989/90
Maize starch	15 (+ 53.84)	10	5	n.a.
Wheat starch	20 (+ 49.84)	14	7	n.a.
Rice starch	18 (+ 51.44)	12	6	n.a.
Potato starch	24 (+ 53.84)	16	8	n.a.
Maize groats)(for)(brewing	18 (n.a.)	12	6	n.a.
and)				
)(for other Maize meal)(purposes	15 (n.a.)	10	5	n.a.
Broken rice	18 (n.a.)	12	6	n.a.

n.a. : not applied.

The fact that the aid is paid for the making of certain products, but will differ very slightly according to the source of the raw material used, raises an interesting point. It would not necessarily be very easy to check that the right amount of aid had been granted because, once incorporated in the finished product, one might find it difficult to determine which was the original source of the starch. For this reason, the companies involved will clearly have to keep very good records to permit verification, and aid will only be granted on the basis of a prior approval. Before giving this approval, the Member State concerned must ensure that all necessary checks are possible. Detailed instructions are given in the Commission's Regulation. These administrative controls also require the applicant to lodge a security with the national authority which will eventually pay the aid. This security is 25 ECU/tonne of basic starch, and is only released upon payment of the refund, or in accordance with Article 19 of Regulation (EEC) No 2220/85 (3). The competent national authority must pay the refund, having done all the necessary verification, within 150 days of receiving the applicant's notification. There is also the possibility though of making an advance payment after only 30 days, but this is subject to the need for a larger security.

(c) For sugar

The word sugar, in so far as concerns the raw materials whose processing can attract aid, means beet or cane sugar, syrups which do not contain lactose, glucose, maltodextrine or isoglucose, and isoglucose with at least 41% fructose by weight.

The use of these sugars in the making of products covered by the list in Table 6 can attract production refunds. As with the case of starch, an applicant (who may be subject to prior approval requirements by the Member State) has to keep good enough records to allow verification that any aid was only paid in respect of eligible processing.

The new system will be phased in over four years (4). The purpose is to work towards compensation for the difference between the world market price of white sugar, and the Community price of sugar. To provide the link with the new starch system, a "price of glucose" will be assumed to represent the cost of white sugar bought on the world market. This "price of glucose" will be calculated by reference to the cost of the starches from which it can be made (see Table 7).

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(3) Regulation (EEC) No 2220/85, OJ No L 205 of 3.8.1985, p. 5.
(4) The legal text, Regulation (EEC) No 1010/86, is in OJ No L 94 of 9.4.1986.

Table 6

CCT Heading	Description
ex 13.03 C III	Carrageenan
ex 15.11 B	Glycerol, other than crude
Chapter 29 (excluding subheadings 29.04 C II, 29.04 C III and ex 29.43 B (levulose))	Organic chemicals
Chapter 30	Pharmaceutical products
34.02	Organic surface-active agents; surface-active preparations and washing preparations, whether or not containing soap
Chapter 35 (excluding headings 35.01 and 35.05)	Albuminoidal substances; glues; enzymes
Chapter 38 (excluding subheadings 38.12 A and 38.19 T)	Miscellaneous chemical products
Chapter 39	Artificial resins and plastic materials, cellulose esters and ethers, articles thereof

Table 7

Calculation of the aid for sugar use

Example: period from July to September 1986

		ECU/tonne
A. Sugar price inside the Community: White sugar intervention price plus storage levy		581.80
B. "Price of glucose" (to represent the world price of sugar)		
1. "Price of glucose as such		
(a) weighted average of imported maize prices between April and mid-June	206	
(b) plus transport costs	+ 15 = 221	
(c) take the lower of (b) or the April maize threshold price (248.14) and multiply by a conversion factor of 2	= 442	
2. "Price of glucose" assuming the use of production aid		
(a) production aid (Articles 4 and 5 of Reg. (EEC) No 1009/86, but prior to the adjustment for a wet-basis conversion factor of 1.6)	48.65	
(b) multiplied by a conversion factor of 2 (dry matter basis)	97.30	
1c - 1b calculated net "price of glucose"		344.70
C. Production aid		
Difference A - B = 581.80 - 344.70		237.10

In the 1988/89 marketing year, the refund will be topped up by 25% of any temporary fall in the world market sugar price below the "price of glucose", and all being well, by 50% of any such difference the following year. After that, the Commission will make further proposals in the light of experience. For the time being, all the necessary rules are given in Commission Regulation (EEC) No 2079/86 (5).

Although this sounds rather hesitant, there is every reason to expect that, in the event, the purpose will be achieved well before this time. For example, the amount of aid decided by the management committee in June 1986 was 23.71 ECU/100 kg. This figure was arrived at by the calculation in Table 7.

An important condition of the system is that it should not disturb the arrangement for the starch sector. To look after this aspect, the "management committee" will review the detailed rules of the calculations. The reason for this is that sugar and starch (which is simply a polymer of glucose) are interchangeable for some purposes, and so their relative merits as raw materials ought to be preserved for the sake of stability in the industry. It is not abnormal for "management committees" to behave in this way: for example, the "management committee" responsible for the new starch regime has the opportunity, according to Article 2.3 of the relevant Commission Regulation, to alter their calculations as well if market conditions make this necessary.

According to the basic principle of budget neutrality in the sugar sector, the funds required for the aid will have to come from the farmers and sugar producers. The overall design of the sugar regime sets out how this is achieved in an equitable fashion, and it need not be discussed here.

III. FUTURE OUTLOOK

An important reason for these new price arrangements is that Europe must develop industries based on renewable raw materials. Europe's farmers, who are excellent at their job, will play their part by providing these raw materials in the right quality. We will now be keeping a close eye on our industry, to be sure that they take full advantage of the opportunity being offered to them. They already have many inventive ideas of ways to exploit it, and we expect to see them put to use without delay. This will mean better business for the farmers, better business for industry and a brighter outlook for Europe as a whole.

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(5) OJ No L 179 of 3.7.1986, p. 20, Volume 29.

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