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STUDIES IN THE ARTIFICIAL CONTROL OF RAW MATERIAL SUPPLIES

BY J. W. F. ROWE

No. 1. SUGAR

September, 1930

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STUDIES IN
THE ARTIFICIAL CONTROL OF
RAW MATERIAL SUPPLIES

BY
J. W. F. ROWE

No. 1. SUGAR

Part I. SUGAR INDUSTRY OF CUBA
Part II. MARKETING OF JAVA SUGAR

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PART ONE

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THE SUGAR INDUSTRY OF CUBA

PART I.

A GENERAL CONSPECTUS AND SOME CONCLUSIONS.

The sugar industry of Cuba in its modern form may be said to date from the beginning of this century, for the Civil War (Revolt against Spain) of 1896-98 virtually extinguished the industry of the nineteenth century. This industry had reached an output of just over 1 million tons in 1865, but in 1890 only one-third as much was produced, while in 1900 a great drought coming on the top of the ravages of the war, reduced the output to 284,000 tons. The industry of the nineteenth century was essentially an industry of the Cubans, financed by Cuban capital and managed by them, both as regards the production of the cane and its manufacture and sale, though these were mainly in three separate hands. The cane farming was on a relatively small scale, and the mills were small and therefore numerous, while transport largely depended on the ox-cart. The new industry which was re-built after the Civil War was to be vastly different. The Civil War, while it drove Spain out of the picture, brought in the United States, and though from the political point of view the American occupation ended in 1902, from the economic point of view, the average ton of sugar was permitted to trickle in, and by 1912 it reached nearly 1,480,000 tons, while another 100,000 tons more was added in 1914. For the five pre-war years the U.S.A. was still taking on the average over 90 per cent. of even this rapidly expanding production, despite the fact that Philippine sugar had been admitted free since 1909 up to a limit of 300,000 tons, which limit was removed in 1913, while the domestic production of sugar (U.S.A., Hawaii and Porto Rico) had risen from 971,000 tons in 1902-3 to 1,732,000 tons in 1917-18.

The Great War reduced the output of European beet sugar from 84 million tons in 1912-13 to 5 million tons in 1919-20. Cuba was of practical importance as long as the supplies from Europe were cut off. During the years 1919-20, however, the average 1912-13 price of 3.5 cents per pound was reduced to 2.4 cents, and the large United States beet sugar mills imported in the Great War came to be more or less shut down into the 1920's. The Great War reduced the output of European beet sugar from 84 million tons in 1912-13 to 5 million tons in 1919-20. Cuba was of practical importance as long as the supplies from Europe were cut off. During the years 1919-20, however, the average 1912-13 price of 3.5 cents per pound was reduced to 2.4 cents, and the large United States beet sugar mills imported in the Great War came to be more or less shut down into the 1920's.
production was reached in the same year, and with the peace treaty signed, Europe insisted on having all the sugar which was in existence entirely irrespective of the price. The sugar famine in the U.S.A. and Europe had as its counterpart the "dance of the millions" in Cuba. In May 1920 the c. and f. price New York reached 22.5 cents per lb. A few months later the market registered 36 cents. At the same time as the consumer "went on strike" in the matter of sugar, the general post-war boom plunged down into depression.

The complete collapse of prices marks the beginning of a third phase in the history of the twentieth-century Cuban sugar industry. From 1902-14 the dominant note is expansion and while it was a tremendous expansion, it was hardly more than was necessary. From 1914 to 1920 is a second phase characterised by an equally tremendous expansion, but this time primarily to meet the needs of a Europe temporarily short of its best industry. The third phase, from 1920 to the present day, contains the story of Cuba's struggles to meet the varied results of the world sugar famine, and of the restoration of the European beet industry.

In bare outline the story of the last ten years has been as follows. From May 1920 prices rapidly and more or less steadily declined until a level of 2 cents c. and f. New York was reached at the end of 1921. Soon after the New Year, however, an equally steady, though much smaller, rise began owing to a rapid increase in consumption, and the average price in 1922 was just over 3 cents.* The year 1923 was extremely prosperous from the producer's point of view, the average price being no less than 5.28 cents. During 1924 prices fluctuated considerably, but averaged over 4 cents. The end of that year, however, marks the beginning of the world sugar depression, for the world crop of 1925-26 was 16 million tons larger than in the preceding season, of which increase the European beet industry supplied 2 million tons and Cuba 1 million tons. Although statistical consumption increased by 3 million tons, this excess, combined with the prospects of a further large increase in production, was sufficient to drive prices back again to the 2 cent level in October 1925. It is extremely difficult to generalise as to costs of production in Cuba, but it may be said that very few producers can show a profit at 2 cents c. and f., even to-day, while fewer still could do so in 1925. The marginal producers in Cuba probably require 275-300 cents to make ends meet, though perhaps two-thirds of the production would be distinctly profitable at 2-5 cents. This is, of course, on the basis of unrestricted production. The price was forced down to this extreme of 2 cents owing to the endeavours of the Cuban producers to clear their unsold stocks, and when that had been achieved, there was a considerable reaction. But as the new Cuban crop became available during the early spring of 1926, the price again collapsed, and would probably have gone well below 2 cents if Cuba had not artificially restricted her crop by 20 per cent. Chiefly on this account, the New York c. and f. price averaged just over 2.5 cents during 1926, or exactly the same as in 1925, and at the end of the year had reached 3.31 cents. The Cuban crop of 1926-27 was restricted still more drastically to 4.5 million tons, and both on this account, and owing to bad weather in Europe and Java, the world production was nearly 1 million tons less than in 1925-26. But consumption now came to an abrupt halt, and prices did not average quite 3 cents. Though almost in despair, Cuba decided to intensify the policy of restriction rather than abandon it, and in 1927-28 the Cuban crop was restricted to 4 million tons, while an attempt was made to ration the U.S. market in the hope of obtaining at least a part of Cuba's tariff preference, the balance of the crop being marketed to other countries by an Export Corporation, established for the purpose. But the attempt to raise the American price more or less completely failed owing to a great increase that season of the U.S. duty-free supplies, and though the Export Corporation's sales to Europe were for a time relatively satisfactory, this failure of the U.S. market resulted in a steady decline in prices. By midsummer opinion in Cuba was swinging against restriction, and eventually matters were brought to a head by what amounted to an ultimatum on the part of the American sugar companies, who had never been wholly in favour of the policy of restriction and were now actively opposed. All control of marketing was abandoned in August, and prices rapidly dropped to the 2 cent level, and as the full unrestricted crop of 1928-29 came to market, prices steadily declined to an average of 1.75 cents c. and f. New York for the month of June 1929. The Cuban mills and the Cuban Government were thoroughly frightened, and the American interests seriously perturbed, by the effects of uncontrolled production and marketing, while in addition there was the still more alarming prospect of a further increase in the U.S. sugar tariff now due for revision. Eventually a scheme for compulsory co-operative marketing...
of the whole crop was established. This had an
almost instantaneous effect on prices, and from
then steadily forced down prices to a level of
2 cents. But owing mainly to personal factors,
the requisite finance. As the 193^ crop became
a 2 cent level, but inability to make sales at
speculators to carry greater stocks, have since
available, the Single Seller held out vainly for
the trouble has been excessive production:
that a large proportion of the Cuban crop is
little fault can be found with demand even
in expanding production in 1922, though it is
was almost wholly due to the introduction of a new high-yielding variety
cane. The same is true of Formosa and
Japan, where the increase was undoubtedly due
to a high protective tariff, while the U.S. tariff
was responsible for the increase from Hawaii
and the Philippines. Tariff protection also
accounts for much of the increase from the
rest of the world, and restriction in Cuba
can hardly be made directly responsible for
an increase elsewhere of more than 200-
900,000 tons at the most. Since the sugar
famine, the consumers of the world, or their
Governments, have been determined to develop
supplies under their own control, no matter
what the cost. The lower the price of sugar, the
more tariff protection or bounties have been
increased. Cuba has, in fact, been very largely
the innocent victim of the consumer, who has
deliberately preferred to obtain his supplies in
a more expensive way than was economically
necessary. This is not to say, however, that
the existing producers in Cuba might all have
continued in existence if the world had required
a 5-million-ton crop, or even more, from Cuba.
As this study will show in detail, the American-
owned mills are in general much lower
than the older and smaller Cuban-
owned mills, which produce about one-third of
the output of the island. The Cuban Govern-
ment gave its support to the policy of restriction
largely in order to prevent the extinction of
these high-cost producers, and the consequent
domination of American capital, as well
as the profound disorganisation of the
economic life of the country which would have
resulted if the process of extinction had been
wholesale and rapid. Nothing can, however,
prevent this process in the long run, for the
Cuban mills have not the necessary finance for
modernisation even where that is physically
possible. As well as the struggle between Cuba
and the rest of the world, there has been going
on an equally desperate struggle between the
high-cost and low-cost producers within Cuba,
or, in other words, between the Cuban-owned
mills with the Cuban Government as an ally,
and American capital. Properly located,
organised and equipped, the sugar industry of
Cuba would be able to produce for much cheaper than any other
with the possible exception of places with high protection. Without a proper appreciation
of the Cuban situation, the general attitude of the Cuban
sugar industry proprietors to the matter of restriction is probably due largely to the
belief that it will be impossible to organise the industry on a modern basis without
the Government's help. In this belief they are partly right, partly wrong. The
Government has been of the utmost value, but it has neither been able to prevent
the decrease in the existing marginal producers' profit, nor to accelerate their
development, or to provide the capital which would have been necessary, in the event
of high protection being maintained, to carry out the process of modernisation
on a grand scale. The result is that the existing marginal producers' profit
has been gradually declining, and that the existing margin producers' profit
is not sufficient to maintain the existing marginal producers on the market.
As a result of this, the existing marginal producers' profit has been
declining, and that the existing marginal producers' profit
is not sufficient to maintain the existing marginal producers on the market.
Cuba would be able to produce 5-10 million tons far more cheaply than any country in the world with the possible exception of Java. But the world does not want sugar on an economic basis. Without a proper appreciation of the "make-up" of the Cuban sugar industry and the general attitude of the Cuban Government, it is impossible to weigh the merits and demerits of a policy of control as compared with laissez-faire: hence the justification for the somewhat detailed treatment of these matters in the following pages. The additional capacity created in one form or another from 1922 onwards was essentially low-cost capacity, and while this expansion would certainly have been very much smaller if the prospects of the recovery of the European beet crop had not been so completely misjudged, the existing high-cost producers would ultimately have been replaced by new low-cost producers. But whereas this process might have been gradual, the sudden great addition of low-cost capacity to meet a demand which was, in fact, satisfied from other sources, now necessitated a wholesale retirement of high-cost capacity. For even if by artificial control the whole existing capacity had been preserved until consumption had increased to the requisite extent, the high-cost capacity would have very quickly been rendered superfluous again by the introduction of new low-cost capacity, since if the existing marginal producers were making a reasonable profit, such new producers would be able to enter the field. Under laissez-faire, the high-cost producers would first be decapitalised in order to facilitate modernisation where that was possible, and where that was not, the high-cost mill would have been abandoned or greatly intensified. Cuba chose the latter, and probably it was the correct choice, for otherwise the sacrifices of the two previous years would have been entirely in vain, while there would still be a sporting chance that a wholesale collapse might be avoided, even though, as has been argued above, the high-cost Cuban-owned mills were ultimately doomed in any case. The Export Corporation scheme must also be judged better than no control of marketing, though ideally the whole crop, and not merely the supplies beyond the requirements of the U.S., should have been marketed by one authority. But such a Single Seller scheme was impracticable on financial grounds, and at that time the American mills would not have given their support even in the most nominal manner, for many of them had already exhausted their belief in artificial control and their patience with the Cuban Government. As it was, the control of 1927-28 broke down because the great increase in duty-free supplies to the U.S. market actually reduced the amount of sugar which the U.S. had to purchase from Cuba, with the result that prices went lower and lower, while costs in Cuba had been greatly increased by the drastic restriction to 4 million tons. At this point there was room for a stock-holding scheme: if even 250,000 tons could have been firmly held by producers in Cuba instead of being pressed on to the world’s markets, it would have made all the
difference, for the price might have been maintained near the 3 cent level, and the Cuban mills and the American consumers might have lost heart so completely as they did. At the same time, if any stock-holding could have been avoided without causing the loss of all faith in a policy of control, so much the better, for Cuba would have faced the future clear of what must by its nature be a serious encumbrance. But Cuba did lose faith, and the American interests were able to bring all attempts at control to an end.

The actual handling of the termination of control could hardly have been worse: on this point there can be no two opinions. Whether Cuba was right to abandon the policy of control is obviously a more doubtful issue. From the purely economic point of view, it must be reiterated that laissez-faire was the only ultimately sound policy. But once committed to control, it may well be argued that Cuba abandoned it just when such success as any control could bring was appearing on the horizon. During the season 1927-28 the world's visible carry-over had increased by only 79,000 tons, and before January 1, 1929 Cuba had disposed of the whole of the previous crop. Consumption after its halt in 1926-27 had resumed its rapid increase, and if Cuba had continued to restrict her crop to 4 million tons, the total world production in 1928-29 would have amounted to just 26 million tons, while consumption was eventually to reach nearly 90 million tons, or more than this amount. Stocks would therefore have been reduced well below 2 million tons, and with a continued increase of consumption, the position might have gradually righted itself, for the expansion of tariff-protected and bounty-fed supplies had already approached its limits. Admittedly much of this reasoning is in the light of subsequent history, while the final outcome is, even so, highly conjectural. But at least it may be said that a policy of continued control had a reasonably sporting chance. As it was, Cuba produced a 1928-29 crop of 5,156,000 tons, and even with prices below the 2 cent level, stocks increased by 300,000 tons. Within a period of twelve months Cuba was forced to resume a policy of control, and she certainly did so in circumstances far less favourable than they would have been if control of some sort had been maintained continuously.

Before consideration is given to the marketing control of 1929-30, a word must be said as to the immediate results of the restriction years on the financial position of individual producers; in other words, were the prices realised for the restricted crops sufficient to compensate the increased costs of production of those restricted crops? On the whole the balance probably lay in favour of producers. Put crudely, the 10 per cent. restriction of 1925-26 hurt no one very much, while it certainly had a stimulating effect on prices. The 1926-27 restriction to 4 million tons was more drastic even than it appears, for the acreage of cane was larger than in the previous year, but with an average price of nearly 23 cents most producers probably covered their costs. The still more drastic restriction of 1927-28 undoubtedly increased costs more than proportionately, while prices were depressed to a 25 cent average level, so that a substantial number of producers probably lost money. It must be remembered that the overhead costs of the low-cost producers are more proportionately heavier than those of the high-cost concerns, and therefore it does not follow that if the marginal producers made ends meet, the low-cost producers made any considerable profit, though a few undoubtedly were able to do so. Taking the three years together, the balance, as has been said, probably lay with the producers, a conclusion which is supported by the improvement in the cash position of many American companies during the period, and by the fact that no important Cuban mill was forced to suspend operations.

It remains to consider the Co-operative Export Agency of 1929. The great argument put forward in favour of marketing control as opposed to restriction of output by the American leaders of the industry was that competition in production would continue even if competition in marketing was ruled out; that centralised marketing would not therefore bolster up the less efficient producers as did crop restriction, and that those concerns who could not make ends meet would now quietly be forced out of existence. In theory this is undoubtedly true, but in fact the scheme was virtually forced on to the Americans by the Cuban Government and the Cuban-owned mills, and the latter hoped to use it in self-preservation, while the Cuban Government approved of it for that very reason. There can be no doubt that the scheme was intended not merely to put a stop to "weak" selling, but to force up prices to a reasonable level by putting any excess supply into storage. The argument was that it half-a-million tons or so could be held up for a twelvemonth, consumption would have outrun production; such a hope was not entirely unjustified. But the prevention of weak selling as well as any stock-holding demanded adequate financial backing. Cuba herself was powerless in this respect, and though great efforts were made to secure the co-operation of American banks, the latter were not in the mood for a gamble after the Wall Street crash, which had left the banks interested in the Co-operative Export Agency. The National City Bank held out a helping hand to the smaller competing manufacturers. Without assistance from the mills, the Co-operative Export Agency in the spring of 1929 bought 400,000 tons when they had completed getting rid of their old stocks. The objective of the Agency was to secure the co-operation of American banks, to carry out the general policy of the American Government to prevent weak selling, and to secure the prevention of weak selling in the Cuban market. Even the pre-war selling demands some measure of protection for the weak selling, but it was powerless even in this respect.

Whether a large-scale centralised marketing would have been sound public policy cannot be decided, but it is certainly possible that centralised marketing would be a more effective and responsible measure for protecting the weak selling, but it is certainly possible that centralised marketing would be a more effective and responsible measure for protecting the weak selling, but it is certainly possible that centralised marketing would be a more effective and responsible measure for protecting the weak selling. It has occasionally been suggested that Cuba should be put in the hands of the Co-operative Export Agency; if this were done, the case of Cuba, because of her size and position, is surrounded by many controls which would ensure a large enough market to fill the gap, should Cuba abandon the centralised marketing. It must be remembered that the overproduction of sugar is a substantial number of producers probably lost money. It must be remembered that the overproduction of sugar is not only a matter of individual producers; it is a matter of the industry as a whole. The overproduction of sugar is not only a matter of individual producers; it is a matter of the industry as a whole. The overproduction of sugar is not only a matter of individual producers; it is a matter of the industry as a whole. The overproduction of sugar is not only a matter of individual producers; it is a matter of the industry as a whole. The overproduction of sugar is not only a matter of individual producers; it is a matter of the industry as a whole. The overproduction of sugar is not only a matter of individual producers; it is a matter of the industry as a whole.
the Wall Street crash, while those already actively interested in the Cuban sugar industry, like the National City Bank, had no desire to hold out a helping hand to their Cuban-owned competitors. Without adequate means to finance the mills, the efforts of the Export Agency in the spring of 1930 to hold the price at 2 cents were foredoomed to failure, especially when they had complicated the task by not getting rid of their old crop sugar. That the objective of the Agency was to exercise some control over output and not merely to prevent weak selling, is clear from the history of its operations: it carried the prevention of weak selling to the point of no sales at all. Even the prevention of weak selling demands some means of financing those producers whose want of finance is the reason for the weak selling, but the Export Agency was powerless even in this limited field.

Whether a large-scale stock-holding scheme would have been sounder or not, however, centralised marketing would undoubtedly have been of inestimable benefit to Cuba during the last ten years. It has special limitations in the case of Cuba, because Cuba, unlike Java, is surrounded by many competitors whose output is large enough to enable them to step in and fill the gap, should Cuba withhold supplies. For in January 1921 a law was passed in Cuba prohibiting all sales by individual mills, and providing that the surplus product, which would eventually be divided amongst the mills in proportion to their production. The scheme was designed to prevent weak selling by mills whose normal methods of securing financial accommodation had been disturbed by the collapse of the Cuban banks, and in general to try and prevent any further fall in the price, for at that time 4 cents seemed a ruinous price, for at that time 4 cents seemed a ruinous price, for at that time 4 cents seemed a ruinous price, for at that time 4 cents seemed a ruinous price, for at that time 4 cents seemed a ruinous price, for at that time 4 cents seemed a ruinous price. Since the U.S. importers naturally disliked its monopolistic character, and the present procedure has been adopted mainly in the hope that a general consensus of the buyers may be of assistance, and that the author's conclusions may provide a hypothesis with which the reader may compare his own impressions as he proceeds.

II.—THE POSITION AND PROSPECTS IN 1921–22.

The c. and f. price New York averaged a fraction over 4 cents for the month of January, 1921: for the month of December 1921 the average only just succeeded in keeping above 2 cents. The total imports into the U.S.A. in 1921 were only some 400,000 tons less than in 1920, but imports from Cuba dropped by nearly 1 million tons. During the sugar famine, supplies had been obtained from a variety of unusual sources, and the U.S. importers were apparently no longer anxious to patronise Cuba again on the former scale. For in January 1921 a law was passed in Cuba prohibiting all sales by individual mills, and providing that the whole of the 1921 crop, apart from such tonnage as had already been sold forward, should be handed over to a body known as the Cuban Finance Committee. This committee was composed of certain leading producers and the representatives of the American banks in Cuba. An advance was to be made against all sugar as it was produced and consigned to the Committee, which would make sales as opportunity offered: the surplus proceeds would eventually be divided amongst the mills in proportion to their production. The scheme was designed to prevent weak selling by mills whose normal methods of securing financial accommodation had been disturbed by the collapse of the Cuban banks, and in general to try and prevent any further fall in the price, for at that time 4 cents seemed a ruinous price, for at that time 4 cents seemed a ruinous price, for at that time 4 cents seemed a ruinous price, for at that time 4 cents seemed a ruinous price. Since the U.S. importers naturally disliked its monopolistic character, and the present procedure has been adopted mainly in the hope that a general consensus of the buyers may be of assistance, and that the author's conclusions may provide a hypothesis with which the reader may compare his own impressions as he proceeds. Since the primary object of this study is not to state a case but to provide the reader with material for his own conclusions, the above conclusions will not be further directly elaborated. In such problems as those now under discussion there can be no final judgement, and the reader's own conclusions are likely to be at least as important as those of anyone else.
In any case, the scheme was terminated at the end of the year, at the request of a large proportion of the industry, the general opinion being that, though conditions would have been bad in any case, this control of marketing had only served to make things infinitely worse. The Cuban crop of 1921 was only a little larger than that of 1920, but the reduced demand from the U.S.A., combined with the considerable increase in the European beet crop and the poverty engendered by the general trade depression, resulted in a carry-over of nearly 85,000 tons on January 1, 1922.* Any appreciable carry-over in Cuban ports was an unheard-of phenomenon, and there is little wonder that the price was so depressed. But with the beginning of 1922, demand began to revive with amazing vigour. The Cuban crop of 1922 was almost exactly the same as that of the previous year, and the European beet crop, which in 1920-21 had shown a recovery of more than 2 million tons was only 300,000 tons larger in 1921-22. Prices began to rise, reaching an average of 3 cents c. and f. New York for June 1922, and 7½ for July, while after a break in September the advance was resumed, and for December the average was 3-9 cents. Apparently thriving on this advance in price, demand grew daily stronger: the U.S.A. consumed 1 million tons more than in 1921, and imported from Cuba 1½ million tons more. The result was that by January 1, 1923, the whole of the carry-over from the 1921 crop, and the whole of the 1922 crop, had been disposed of, and stocks in Cuba were negligible. The European beet crop of 1922-23 registered a further advance of 2 million tons, but at approximately 4½ million tons it was still only one-half of the pre-war period. The only disturbing factor from the point of view of Cuba was the possible effects of the successive increases of the United States tariff. The duty had been raised by the President in virtue of his emergency powers, from 2.5 cents in 1921 to 3.0 cents in 1922. This raising of the tariff was intended to secure two main objects: to preserve the existing scale of consumption in the U.S.A. and to stimulate production so that the U.S. might become less dependent on foreign supplies, and thus make impossible any repetition of the recent sugar famine. The general revision of the U.S. tariff was due in 1923. Proposals for a further increase were fought tooth and nail by the American sugar interests in Cuba, but despite all their endeavours, the full rate of duty was raised to 2.65 cents in September 1922. This very greatly increased protection would obviously tend to increase the U.S. domestic production, but opinions as to the probable or possible extent of the increase varied enormously. The high prices of 1919-20 had led to an increase in the U.S. beet sugar production from a level of 650-700,000 tons to over 950,000 tons. This increase was more or less maintained in 1921-22, but in 1922-23 the crop fell to 600,000 tons. It was clear, therefore, that high prices could stimulate production, but beyond that the matter was largely guess-work. High prices had greatly increased the Louisiana cane crop, but this crop, even at 300,000 tons, was really an insignificant factor. Porto Rico had not responded much to the high prices of 1920, though clearly the island could produce considerably more. But by far the greatest potential danger to Cuba lay in Hawaii, and still more in the Philippines. That Cuban sugar interests feared the results of the new tariff is evidenced by their unparalleled efforts to defeat it.

What policy would have been adopted by a Dictator of the Cuban industry surveying the position on New Year's Day 1923? Though such a personage was, of course, at that time non-existent, the question itself merits attention because it is precisely what every producer of Cuban sugar, whether American or Cuban by nationality, was asking himself at approximately that date, and while it is always a difficult operation to put oneself back in time and to assume an ignorance of what has actually happened, it is worth while on this occasion. The major factors in the situation have already been sketched. At nearly 2 million tons production through the previous harvest the price slump which was obviously in progress and then later, to increase the scale of production so that the U.S. might become less dependent on foreign supplies, and thus make impossible any repetition of the recent sugar famine. The

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* Harvesting in Cuba usually begins in the latter half of December, though in recent years grinding has been prohibited before January 1, and in one year January 15. New cane is planted in the autumn of the previous year, but harvesting is almost universal, i.e. the cane is cut down at harvest, and shoots again by itself.
that, even if temporarily checked, consumption would not resume its expansion very shortly? Demand seemed very inelastic, and with the revival of general prosperity now fully under way in the U.S. and apparently dawning in Europe, there seemed every prospect that at least the pre-war annual average increase of 3 per cent. would be required, and very likely more. Even the 1922 consumption was no greater than the immediate pre-war consumption. Assuming, therefore, a steady rate of expansion, according to the Western world obtain such increased supplies without recourse to Cuba? There were obviously two possible sources: an increase in the domestic production of the U.S., under the stimulus of the new higher tariff, and the rapid restoration of the European beet industry to something like its pre-war proportions. The former would undoubtedly take place, but it would probably be some years before the actual tonnage increase would be appreciable in comparison with world production. The restoration of the European beet industry would also presumably take place, but, judged by the slow advance to date, it seemed very improbable that the process would be completed within five or even more years. For at any rate four or five years, it seemed certain that any large increase of supplies would have to come from Cuba, and by installing up-to-date milling machinery and extending the whole scale of operations, it might be possible for Cuba to compete with even the most highly protected or bounty-fed producers, while, as the memory of the sugar famine grew more dim, the consumer might not be so willing to pay for such protected supplies. It seems, in fact, more than probable that our Cuban Dictator would have arranged for a considerable expansion of the island's production, perhaps of the order of one-third to one-half million tons annually for the next three years or so at least, while he would have pushed on with the modernisation of milling plant, and sought by all possible means to improve methods of cultivation and so reduce also the cost of cane to the mills.

III.—THE CAPITAL ORGANISATION OF THE INDUSTRY.

With the general conclusion that nothing much was to be feared either as the result of the new U.S. tariff or from the European beet industry, and that therefore a policy of expansion was the policy for Cuba, many of the leaders of the Cuban sugar industry agreed. But it is now necessary to attempt some description of the varied and manifold interests which compose that industry, for the divergent attitudes and policies of these different interests still is evidenced in Cuba. That proportion of mills, for broadly speaking, the larger mills are all foreign-owned, the really Remedial interest in some 85 mills out of the 188 which operated in the 1921-22 season. These 85 mills produced 53 per cent. of the output. In addition to these American mills there are a certain number of other foreign-owned mills, and purely Cuban interests produced only about one-third of the output, though they owned considerably more than that proportion of mills, for broadly speaking the larger mills are all foreign-owned, the really large ones all being American-owned. Thus the first broad line of division is one of nationality, but consideration of this factor may be postponed pending further analysis of the American interests.

The pre-war American investment was almost wholly by private interests; it was not until the war period that the banks and trust companies took a hand, notably the National City Bank and the Royal Bank of Canada. The American Atlantic sea-board refineries virtually own their own banks. In addition, the banks, and especially the two above mentioned, had developed an ordinary banking business in Cuba on an extensive scale, and played a large part in the normal financing of the sugar mills, both American and Cuban. It is impossible to disentangle the precise relations of private interests, bank interests and refinery interests, but it may be observed that many attempts lead to most erroneous conclusions. Thus it is frequently said that the banks to-day control at least half the crop, and that even this proportion was far exceeded in 1922. The accuracy of this statement depends entirely on the meaning attached to the word "control." The two banks above mentioned had in 1920 made extensive loans on the security of sugar stocks, etc. for the ordinary purposes of crop financing and when the catastrophic price-
fall occurred, the security for these loans was no longer adequate collateral. A number of companies could not provide more collateral, still less repay the loans, and the banks therefore had to take over these companies. The National City Bank brought together the companies left on its hands into the General Sugar Estates Corporation, the directors being nominees of the bank; this group with its eight centrals accounted for an output of about 300,000 tons. The Royal Bank of Canada had to take over some of the companies left on its hands into the General Sugar Estates Corporation, the directors being nominees of the bank; this group with its eight centrals accounted for an output of rather under 300,000 tons. Even in 1922 the banks directly controlled not more than, say, 15 per cent of the Cuban crop, and since the Bank of Canada has recently succeeded in selling some of its companies, these banks are now without direct control to-day is probably not more than 10 per cent. Indirectly the banks are far more interested, first through loans made on sugar for ordinary crop financing purposes, and secondly by the fact that they act as underwriters for numerous issues of bonds. But this gives no more and no less control than is ordinarily the case where an industry requires temporary financial assistance from the banks. The banks certainly have "control" of a sort in all such cases, but such "control" must not be confused with the direct control or virtual operation of concerns which are the property of the banks.

The extent of control by the Atlantic seaboard refineries is also often greatly exaggerated if any reasonable meaning is attached to the word. Thus an article in the periodical Concerning Sugar, dated May 1922, asserts that of the 85 American-owned mills in Cuba, no less than 49 are either owned outright by American refineries, or are affiliated to them by interlocking officers and directorates, and that these 49 mills have an average capacity more than double that of the remaining American mills, and nearly three times that of the Cuban and European-owned mills. The validity of this analysis need not be called in question, but the reader is obviously invited to infer the existence of a vast sugar-producing and refining trust. The fact that one, or even two or three, of the directors of a refining company are also directors of one or more sugar mills, does not imply that the refinery controls the policy of those mills any more than that the mills control the refinery. Naturally sugar mills are not averse to the establishment of contacts with a refinery and vice versa, but it is a long step from a liaison of this kind to control in any real meaning of the term. It may be noted that Concerning Sugar is a publication of the United States Beet Sugar Association, and that this article appeared during the tariff negotiations of 1922. The real position appears to be as follows. In 1922 the American Sugar Refining Company had recently acquired Centrals Canagua and Jaronu, though the latter had already been taken in 1921; it has since been expanded until it is now the largest sugar mill in the world. In 1922 the American Sugar Refining Company therefore controlled only about 70-80,000 tons of sugar; in 1928-29 this had risen to nearly 200,000 tons with the expansion of Jaronu, but even this is only about 12-15 per cent, of its raw sugar requirements. Secondly, the United Fruit Company, which owns the Revere Refinery at Charlestown, Mass., also owns two centrals, Boston and Preston, with a combined output of some 260,000 tons, which is approximately the output of the refinery. Thirdly, the Cuban American Sugar Company owns six mills in Cuba, including the contiguous properties of Chaparri and Deliciosa which are operated as a single unit and form the largest sugar estate in the world: these six centrals produce about 300,000 tons. The Company owns the Colonial Sugars Refinery at Granmerry, together with sugar lands in Louisiana, and also the Cardenas Refinery in Cuba, which refines mainly for local consumption. In this case the Company's raw sugar production somewhat exceeds the requirements of its refineries. Fourthly, the McCahan Refinery at Philadelphia is owned by a number of companies under the virtual control of the house of Rionda. The Rionda group now account for about 1 million tons* of raw sugar, whereas the McCahan refinery meldings amount only to a quarter of this amount. No other refineries appear to own a controlling share in Cuban mills, nor do other sugar-producing companies control refineries. The position is quite as much that sugar-producing companies control refineries as the reverse position, and my conclusion stated in general terms is that in 1922 producers and refiners were directly associated to the extent of about 1 million tons, or 20 per cent, of the Cuban crop. In 1922 the extent of refinery control was perhaps greater than this. The Warner Sugar Corporation had its huge refinery at Edgewater, N.J., and owned Central Miralda with an output of 70,000-80,000 tons. The Warner Corporation was one of the companies taken over by the National City Bank in 1927, and in 1929 the National Sugar Refining Company sold the refinery to the American Sugar Refining Company, thus bringing the previous vertical combination.

* Not including General Sugar Corporation, which it has virtually municipal and whose output it has sold since March 1929.
1922 the Pennsylvania Sugar Company's Refinery at Philadelphia was leased by the Atkins group which virtually controlled the Punta Allegre Sugar Company with its six centrals and an output of 300,000 tons of raw sugar: the refinery has since then been handed back to the Pennsylvania Company, probably under pressure from the National City Bank, which has a large say in the general conduct of Punta Allegre. But against this the American Sugar Refining Company, which virtually controlled the American Sugar Refining Company, with an output of 300,000 tons from its six centrals, the Cuban Dominican Sugar Company, with an output of 200,000 tons from its seven Cuban centrals, and the Guantanamn Sugar Company, with an output of 150,000 tons from three centrals: these concerns are nominally quite independent of each other, but the fact that the same two persons hold important offices in all three may betoken some co-ordination of outlook and policy. Finally, mention must be made of the Cuba Company with its two large centrals producing 120,000 tons, and it must not be forgotten that the American Sugar Refining Company and the United Fruit Company also each have two large centrals, as mentioned above. Thus the American capital in Cuban sugar is centralised and syndicated to a very considerable extent, and in this respect offers a striking contrast to the purely Cuban-owned concerns, which rarely own more than one central, and as has been said, even that is on the average much smaller than the average of the American centrals.

IV—THE FATEFUL DECISION TO EXPAND PRODUCTION.

It is now possible to return to the discussion of the situation on New Year's Day 1923, and to consider the attitude and policies of these variously interested parties in comparison with the conclusions which it was suggested, might have been reached by a Dictator for the industry as a whole. The interests of the two banks may be considered first. Put shortly, they had incurred "bad debts," and with bad debts the only alternative to writing them off is to try and convert such assets as exist into propositions which will in time pay off the debt. No one, least of all perhaps a bank, likes writing off a loss, and in view of the not promising outlook, there was a strong case for a policy of modernising and enlarging the mills left on their hands in the hope that, with satisfactory prices and reduced costs, they would eventually convert them into satisfactory investments, or be able to sell them off at remunerative prices. Even if the policy of increasing production to the point of lowest costs was copied by other mills, and overproduction resulted, the banks still hoped that with the strength of their financial resources their mills could be brought to a level of costs lower than many would be able to reach, especially the small family-owned Cuban concerns, and that therefore they would survive until a new equilibrium was reached. Accordingly, the two banks decided on a vigorous policy of expansion to secure lowest costs—indeed they had already set things in motion during 1922.

The attitude of the refineries owning mills in Cuba is somewhat less easy to summarise. They have one big common bond with the rest of the industry, namely, opposition to a high U.S. tariff on sugar. For these Atlantic seaboard refineries deal only with imported sugar, and therefore any increase in the U.S. domestic production means less demand for their imported product. Provided that a refinery produces for itself on approximately...
the same scale as its competitors, it is not specially averse to high prices within limits, since what they may all lose as refiners they will win as producers. But the sugar famine had sent prices beyond any such limits, and had severely disorganised the refining business, while the American Sugar Refining Company, which then directly controlled no raw sugar supplies, may have felt itself at a disadvantage with the refineries which did own Cuban mills, such as the Revere Refinery of the United Fruit Co., the Colonial Sugars Refinery of the Cuban American Sugar Company, and the giant Edgewater refinery which was then associated with the Warner Corporation’s central. Hence the American Sugar Refining Company had proceeded to the purchase of Centrals Cunas and Jarou, with the full intention of developing the latter to the utmost: they may also have taken note of the very high efficiency of the refineries belonging to the United Fruit Company. Taken as a whole, however, the refineries appear to have remembered that though sugar refineries occur occasionally, it is on balance cheaper to buy sugar than to produce it. There has been no other large extension of vertical combination; on the contrary, there has been some separation of existing combinations, as noted above. But the lead of the American Sugar Refining Company in developing Jarou was by no means disregarded by the industry. The attitude of the remaining American mills is still less easy to assess. The idea that they, one and all, deliberately adopted a policy of modernisation and expansion, is probably nearly as misleading as the allegation, often made by Cubans, that their object in so doing was simply and solely the deliberate extinction of the Cuban mills. As to the fact of pretty general expansion by the American interests, the idea that American capital was plotting the downfall of the purely Cuban mills is equally fallacious. But it will be convenient at this point to survey briefly the attitude of the Cubans towards the American interests. At the back of the Cuban mind is the feeling that all was as well before the invasion of American capital as it has lately been ill. If thrst their attitude was one of good-humoured contempt, the “We have been growing sugar before you left England, so don’t think you can teach us” attitude. The early American companies did indeed merit a good deal of such contemptuous criticism. The erection and operation of the actual sugar mill was well within the scope of their experience, but many of them had to buy their experience on the agricultural side, and the Cuban cane farmers naturally saw to it that they paid a suitable price. With their predilection for large-scale methods, the Americans preferred to purchase their cane from as small a number of cane farmers as possible. They therefore let out their land in large areas to managar-colonos, retaining little control beyond arranging the acreage to be planted or worked each season. These colonos were not always the owners of the land, and the absence of any direct association of the Cuban farmers with the new industry has made them destitute of the necessary knowledge for appreciating the results they had gained, and not this result of the industry._

* See p. 18.
season. These colonos were able to take advantage of the absence of supervision, knowing that the American managers had not the necessary knowledge for supervision even if they desired to exert it. They made the Americans pay far more than was really necessary, and waxed fat on the excess. Most of them lived in the cities and often even abroad, only visiting their plantations now and then: on material standards the life of these colonos before the war was a very pleasant gentlemanly affair, in some cases of the Americans tried to farm part of their lands themselves, but they lacked experience; and the salaried official in a foreign country could be persuaded only with great difficulty to make the effort to gain that experience, and to take that interest in the land which good farming of any sort demands. For a long time their "administration cane," i.e. cane grown by the company, cost most American mills enormously more than buying cane from even the most rapacious colonos. The Cubans soon began to recognise that the Americans were greatly reducing milling costs, both by large-scale operations and superior plant, and also through a more efficient juice extraction, but they felt that the Americans were labouring under the delusion that mill efficiency was the important thing, while in their view this was a secondary consideration to the actual production of the cane. The true doctrine is that neither should be sacrificed or neglected to the interests of the other, but that each should receive the attention necessary to keep abreast with the march of agricultural and industrial technique. If the Americans are to blame for having devoted all their attention to the milling end, they have, at any rate, secured results which may be said to compare most favourably with anything which the Cubans may have experienced at the agricultural end.

The good-humoured contempt of the early years gradually changed to one of apprehension. The Americans were learning something about agriculture: they were not indeed following the traditional line of cane farming in Cuba, but they were certainly developing with some success a technique of their own, an adaptation of arable farming in the Middle West, for which the wide flat lands of Camaguey and Oriente provided a suitable scope. The development and results during the war period changed Cuban apprehensions to downright fear. They realised that the whole industry was rapidly passing out of their hands. They still felt—as indeed many do even at the present day—that the Americans did not yet know how to run the sugar industry of Cuba at a profit: they could point to many cases where little or no return had yet been obtained from expenditures of millions of dollars (except during the "dance of the millions" when any fool could make money), and they can still do so to-day. But they began to realise that if there ever was over-production, it would be the Cuban mills which would sink first, not only on account of the stronger financial position of the American companies, but also because of their undoubtedly lower costs of production. The crisis of 1921, though relatively short, confirmed their worst fears. It was the Cuban mills which suffered most, just as it was the Cuban banks which had to put up the shutters. The organisation of banking and of investment in Cuba made it most difficult for the ordinary half-family purely Cuban concern to raise money to rebuild or re-equip its mill on modern lines, while in many cases it was useless to do this because physically impossible to obtain the greater supplies of cane needed for an economical large-scale milling plant. It was still more difficult to launch completely new enterprises in competition with the Americans in far-off Oriente. Hence Cuban capital had played a relatively small part in the expansion of the industry up to 1920, and after the banking crisis of that year it could obviously play only a minor role. The result was a further reduction of Cuban influence, to compare most favourably with anything that the Cubans may have effected at the time.

Moreover, the rise in the price of sugar during the "dance of the millions" when any fool could make money, and the next he is in the depths of depression and despair. Cast down by his failure to defeat the tariff, he soon took comfort in the steady rise in prices,
and as the 4 cent level of January 1923 became the 6 cent level of April, he became convinced that all was well, and set about expanding production with nearly as much will as his American rivals, though with far less means.

It seemed advisable to undertake this somewhat lengthy analysis of the situation towards the end of 1922 because of the rather widespread idea that the expansion of the Cuban crop to the 5-million mark was, so to speak, the inevitable culmination of the expansion begun during the war years. Such an idea is erroneous and extremely misleading. Broadly speaking, the crops of the five years 1919-23 all ran a little below the 4 million mark: the crop of 1923 was only 3½ million tons, owing to bad weather, and even the 1924 crop only just exceeded 4 million. There are no satisfactory statistics of acreage under cane for this period, but it is fairly clear that new planting ceased abruptly on the termination of the war. Since for five years there was no increase in the crop. Even with a 4-million ton crop, Cuba would probably have experienced difficulties as the result of the sudden restoration of the European beet crop, but these would have been trivial in comparison with the troubles entailed by a 5-million ton crop. The leaders of the sugar industry, whether from the narrow point of view of the profits of their particular concerns, or from the broad point of view of the good of the industry as a whole, committed a terrible error when they decided on a policy of further expansion. Their crucial mistake lay in supposing that the restoration of the European beet industry would take at least another five to seven years to accomplish. Even looking backwards, it is extremely difficult to say that they ought to have known better: as has been suggested, a Director would probably have ordered expansion at the rate of one-third, or even one-half, million tons a year. This is not a case of unreasonable optimism by the entrepreneur function, still less an instance of the blind folly which sometimes appears to overtake the capitalist system: it was just a wholly excusable error of judgment, though it if had been entirely inexusable, the penalty could hardly have been worse.


The actual course of events may now be compared with the expectations thereof. During 1923 everything went according to plan. The Cuban crop was, as has been said, 400,000 tons below normal owing to drought, and this sent prices in April and May well above 6 cents. As it became clear that consumption was not exceeding that of the previous year, prices soon began to decline, but were still about the 5½ cent level in the last two months of the year. The European beet crop of 1923-24, then being harvested, showed an increase of 3½ million tons, and the American beet crop showed a substantial recovery from the low figure of 1922-23. The Cuban crop of the spring of 1924 returned to the 4-million mark, and it became clear that cane production was expanding not only in the U.S. possessions and the Philippines under the influence of the increased tariff protection, but pretty generally throughout the world. For the season September 1, 1923-24, the total world production of sugar was nearly 2 million tons greater at approximately 20 million tons, but after its rest during the previous season, consumption once more leaped up by 2 million tons, and the visible supply on September 1, 1924, was reduced by 290,000 tons to the low level of 982,000 tons. Prices, however, were on the decline, and had reached 3½ cents average for July, though August was better, and September October and November all averaged over 4 cents. This check to the price-fall is somewhat extraordinary in view of the obviously large European beet crop then being harvested, and at least a strong presumption in favour of a much larger crop shortly to come from Cuba.

The explanation presumably lies in the almost complete exhaustion of visible stocks in Europe, and their very low level in the U.S.A.: the world had, in fact, calculated things just a little too finely in allowing prices to decline quite so far during the summer months. We now come to the season 1924-25 and its complete destruction of the expectations of 1922. As soon as the European beet crop began to come seriously into the market the price of sugar rapidly fell away. For the month of December 1924 the c. and f. New York price averaged 3½ cents, and 3 cents was touched: for the month of January the average was only 2½ cents. The Cuban crop then began to arrive, and for a time the rebuilding of depleted refinery supplies was a little too finely in allowing prices to decline quite so far during the summer months. During February, March and April, Cuban sellers were making desperate efforts to arrest the fall in prices and restore the 4 cent level. But by May 1, 1925, that 3½ million tons in Cuba had probably been purchased, and prices fell back at the rate of 1 cent a month. By June, however, prices had increased by a further 1½ cents per pound, and the 4 cent level was restored. By October there were few stocks in Cuba, and prices actually collapsed. The world supply was 2½ million tons, an increase of 1 million tons on the previous season, and a recovery to 3½ cents level. Consumption, however, continued to be sluggish in consequence of the sharp increase in prices. On the other hand, the European beet crop of 1924-25 was an increase of 1½ million tons on the previous season. Of the total European beet crop of 1924, Cuba just over 2 million tons, and 200,000 tons, while 3½ million tons came from France, and about a million tons from other European countries. In the latter case the good weather, which had never before recorded more than 6 million tons, was the only factor which had brought about such results.

The world crop of sugar was estimated as 9 million tons, and, in consequence of the improved weather in the sugar island, was the largest crop ever made. The American beet crop, being only 4½ million tons, was almost completely utilized, and the demand for sugar rapidly fell away. For the month of December 1924 the c. and f. New York price averaged 3½ cents, and 3 cents was touched: for the month of January the average was only 2½ cents. The Cuban crop then began to arrive, and for a time the rebuilding of depleted refinery supplies was a little too finely in allowing prices to decline quite so far during the summer months. During February, March and April, Cuban sellers were making desperate efforts to arrest
the fall in prices and restore at least a 3 cent level. But by May 7, 1925, there were no less than 1,585,000 tons in Cuban port warehouses, and probably a considerable amount more held back at the mills. By June 1 port stocks had increased by a further 150,000 tons, and the average price for July went below 24 cents. On October 1 there were still nearly 600,000 tons in Cuban ports, and during that month prices finally collapsed. The average for October came out at a fraction of 24 cents, but quotations had been down to 194 cents. In the last two months of the year there was a recovery to a 24 cent level since as well as the huge increase in production, there was also proceeding a record increase in world consumption. The world's statistical consumption in 1924-25 may be put at the round figure of 23 million tons, an increase of no less than 3 million tons on the previous season. World production in 1924-25 may be put at 237 million tons, an increase of 36 million tons on the previous season. Of this increase, the European beet crop contributed 2 million tons, Cuba just over 1 million tons, American beet crops 200,000 tons, while the remaining 400,000 tons came from the other cane-producing countries, in which those enjoying the protection of the U.S. tariff were again conspicuous. On September 1, 1925, the world's visible supply stood at 1,612,000 tons as conspicuous. On September 1, 1925, the world's visible supply stood at 1,612,000 tons as conspicuous. On September 1, 1925, the world's visible supply stood at 1,612,000 tons as conspicuous.

Even if invisible stocks were above the normal level of convenience—a matter of considerable doubt—it nevertheless seems worth drawing attention to the fact that an excess production of 600,000 tons on a total of 23,000,000 tons, or little over 2.4 per cent., was sufficient to drive down prices from an average of 4.18 cents for the calendar year 1924 to 2.57 cents for 1925, or nearly 40 per cent.

The Cuban industry, and indeed the sugar producers of the world, were stunned with surprise by the sudden enormous increase in supplies. The surprise at the increase of the European beet crop was only a little greater than their surprise at the increase in the Cuban crop. It may be thought that there was much less excuse as regards the Cuban crop, but it must be remembered that the Cuban Government had no acreage statistics, and even the large American combines were planting in complete ignorance of each other's programmes. It has been said above that the chronic optimism of a capitalist system can hardly be blamed for the adoption of a policy of expansion, but in the execution of that policy the chronic tendency for a large number of competing producers to overdo things is clearly manifest. For the crop might have been even bigger than the 5.1 million tons which was actually harvested. No statistics whatever are available, but it is certain that a considerable acreage of cane, some say as much as the equivalent of another 1 million tons of sugar, was left uncut, simply because the centralists reckoned it was not worth the expense of cutting and grinding at a sacrifice of prices already in May, down to 24 cents c. and f. New York. But even making allowance for this, the real surprise to everyone was the increase of 2 million tons in the European beet crop. Such an increase in a single season was almost unbelievable; at the most a doubling of the annual 1 million tons increase of the three previous seasons might have been deemed possible. What would have happened if consumption had not also increased by an almost unbelievable amount, hardly bears thinking about from the producer's point of view. On the other hand, if consumption without the inducement of lower prices had increased by only 2 million tons, which is quite within the bounds of probability, and if production had done no more than fulfil expectations—that is to say, 1 million tons extra from Cuba and the same from Europe, making a total world crop of, say, 21.5 million tons against a consumption of 22 million tons—the situation would have been almost equally serious from the consumer's point of view. If our imaginary Dictator had had charge of world production as well as that of Cuba, the consumer would have fared just as badly as in actual fact producers fared without him.

Towards the end of 1925 every man, woman and child in Cuba, from the mill-owners and mill-managers to the poorest peasants and laborers, were depressed to the point of despair. At "sacrificial" prices the Cuban ports were being more or less cleared of stocks, a noticeable difference to the situation at the end of 1924, but in 1925 there were no large invisible stocks in the form of uncut cane standing in the fields, and there was no prospect of a large increase in the coming crop, as there was now. If there was no calamity in the weather, it seemed more than probable that the crop of 1926 would reach 5 million tons and price further increase must be anticipated from other cane-producing countries, though bad weather had considerably reduced the U.S. beet crop. The sugar crops of the Far East were up to
normal, and Java during the summer of 1925 (which crop is reckoned statistically amongst the world crops of 1925-26) had harvested in a favourable season 2-3 million tons as compared with 2-0 millions the previous year. The outlook was for a world crop of roughly 25 million tons. This meant that consumption must increase another 2 million tons, following the phenomenal increase of 3 million tons in the previous season, and even that would effect no reduction in stocks. As the European beet harvest drew to a close, fulfilling expectations with a crop of 7-0 million tons, and as the Cuban campaign began to get fully under way, despair in Cuba began to turn to desperation. The stage was being rapidly set for restriction as the only possible remedy in a situation where a definite remedy of some sort was now deemed absolutely necessary.

At this point it will be as well to offer certain conclusions as to costs of production in Cuba. It is extremely difficult to generalise about costs in any form, owing to the fact that the mills purchase about 85 per cent of their cane from cane farmers, who receive payment in the form of a percentage of the weight of sugar in their cane at an official average price which is calculated by Government officials every fortnight during the harvest. If, therefore, the selling price of sugar is high, the cost of cane to the mills is high, and therefore their total costs are likely to be high. A mill's costs of producing sugar vary even more, from year to year, sometimes by a large percentage; thus for the 1921-22 season the U.S. tariff commission estimated the net cost at the mills, including interest but excluding selling expenses, at 2-14 cents, but for the 1922-23 season at 2-67 cents, the difference being the almost wholly to an increase in the price at which the mills purchased their cane, consequent on an increase in the selling price of sugar. Even if complete statistics of costs at all mills were available, such information would therefore be of little use, for no reasonable meaning could be attached to averages calculated from it. The only reasonable meaning which can be attached to such a question as "What are the costs of production in Cuba?" is "What price is required to maintain the existing, or any given, volume of production?"

If such a question is asked with reference to the "long period," in the technical economic sense of that phrase, the price must cover depreciation and interest. With regard to the latter, it may be observed that while bank interest rates are nominally 5-10 per cent, actually this is increased by various commissions, etc., to something nearer 14-15 per cent. The cost of temporary accommodation, at any rate for the Cuban-owned mills, are therefore high, and in addition most of the mills, American even more than Cuban, have a considerable amount of bonded indebtedness. My personal conclusion, based on a large number of estimates by well-informed persons, is that in 1924-25 Cuba required a price level of 2-5 cents c. and f. New York to provide the cane farmer with sufficient inducement to continue production, to cover the costs of the mills on that basis, and to meet the necessary selling and transport expenses. Since then, costs have probably been reduced owing to improved technique, etc., and the figure may now be put at between 2-30 and 2-40 cents. To this must be added a rate of profit suitable for such an investment of capital, at the least 5-7 per cent, and it may be concluded that the "marginal cost of production" of 4-4-5 million ton crop is not much below 3 cents, even to-day. Two-thirds of the production, however, would probably be profitable at 2-25 cents or a little higher. Cuba will in due course adjust her sugar industry to a 2 cent price level, but that will not be within the next five years. When consideration is given to "prime" costs, the problem becomes even more difficult, and any conclusions must be still more doubtful. An average figure for depreciation and interest would be 0-5 cents, and costs on this basis would therefore be about 1-85 cents. If the selling price of sugar stood at this level, however, the cost of cane to the mills would be greatly reduced; as the price falls, so this item of cost declines, and even at a low level, this item amounts to about one-half of the total costs. For practical purposes, everything depends in the short period on the cane farmer's costs of producing the cane. By reducing his expenditure on weeding, etc., by reducing rates of wages, and so on, the cane farmer can for a year or two produce for a very small sum: the advantage of ratoonage is enormous under such circumstances. Such a lowering of the standard of cultivation is bound to make itself felt in reduced yield, if not in reduced acreage, but Cuba will probably continue to produce 4-5 million tons even if the New York price remains below 1-5 cents for another two years. At the same time, if the world ultimately wants such crops from Cuba or an increased production, both plantations and
VI.—THE RESTRICTION OF THE 1925-26 CROP.

It is unnecessary for our purpose to attempt to trace in detail the developments of opinion which finally culminated in a recommendation from the Planters Association to the President of Cuba that the 1926 crop should be reduced by 10 per cent. from the Secretary of Agriculture’s estimate of 5,200,000 tons. Probably at least 50-90 per cent. of the industry were in favour of restriction measures of some sort, but the reasons for the attitude of the different interests in the industry varied considerably, and merit attention. The purely Cuban mills were almost all in favour because the weakest of them knew that they could not possibly weather 2 cent sugar, and the better of them were unwilling to see the Cuban share of the industry still further reduced in proportion to the American, while none of them were anxious for competition to work its will unchecked. The American interests were far less unanimous. The enormously powerful Rionda interests came out strongly pro-restriction; rumour’s busy tongue said that the explanation was that Rionda and his associates had a large bull account, but it is perfectly reasonable to assume that they deliberately came to the conclusion that restriction was the right policy.

On the other hand, the banks were violently opposed; they had sunk large sums of money in endeavours to obtain the benefits of large-scale production, and their mills were now amongst the lowest cost producers. If production were restricted, this money would have been largely thrown away, and the eventual re-establishment of equilibrium through the elimination of the weakest producers would be indefinitely postponed. The other American interests were spread between these two extremes, but there was in general a rather strong bias against restriction for two reasons. Nearly all the mills were heavily mortgaged, and it had become customary to compare the degree of mortgage in terms of the previous season’s crop, i.e., so much per bag; hence if production was restricted, the degree of mortgage would be increased. Though pure window-dressing, this aspect of the matter is said to have received much attention in financial circles. Secondly, it was clear that if production was restricted, less money could be borrowed from the banks against sugar produced. But against these considerations were the uncomfortable feeling that restriction was “contrary to economic laws,” there had to be set the consideration that, should the Cuban interests and those in favour of restriction appeal to the Cuban Government, it might fare ill with any declared opponents of restriction in the matter of quotas and so on, while at any cost the issue must be preserved from taking on a nationalistic Cuban versus the foreign capitalist complexion. Moreover, it must be realised that the prospect of 2 cent sugar seemed nearly as terrifying to many of the American interests as to the Cubans. Hence there were few voices raised against restriction, while those in favour were many and loud—a situation very commonly characteristic of the birth of restriction schemes, as our other studies will show.

Faced with this recommendation from the Planters Association, the Cuban President and his ministers would almost certainly have preferred to send it back with their blessing and nothing more. There is no evidence that at this time the Cuban Government had any desire to take a hand in the game. But the uncompromising opposition of the two American bank groups, and the wavering attitude of the other interests, made it clear that restriction could never be instituted on a voluntary basis: unless the Government made it compulsory, there would be no restriction. Without restriction it was practically certain that a number of mills would close down, while for a time at any rate the industry as a whole would make insignificant profits. During this time, the Government would be deprived of by far the most important source of its revenues. Again, in many country towns and villages two-thirds of the total income of the population is derived directly and indirectly from the local mill or mills; the situation is much the same, though often on a larger scale, as that in many colliery villages in South Wales. The closing of any appreciable number of mills was to be avoided at almost any cost from the Government’s point of view. Doubtless others, be-
sides the extreme nationalists, took the view
that if the foreign capitalists suffered some
loss by restriction, they were after all much
more able to bear losses than the Cuban
peasants: they should pay to avoid what
would be disastrous to the Cuban nation. It
could be only a short time before consumption
would catch up production, and therefore
restriction was the right policy. Finally,
some definite Government action would at
least put a stop to the ugly reports of revo-

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would catch up production, and therefore
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some definite Government action would at
least put a stop to the ugly reports of revo-
lutionary talk which were brought back from
the country districts to the capital. Hence
the Cuban Government felt themselves forced
to take the plunge.

The law of May 3, 1926, commonly known
as the Verdeja Act, provided for a 10 per cent
reduction of the crop, then being harvested.
Article II of this Act created a temporary
production tax of $5 per bag of sugar in
excess of 90 per cent. of the estimated crop
for each mill during the present year. The tax
was, of course, prohibitive, but if incurred, it
was to be collected in the same way as the
ordinary revenue tax of 10 cents per bag pro-
duced: no new administrative machinery was
required. The proceeds of the tax were to go
to the Special Fund for Public Works, thus safeguarding the Government from any suspicion
that it was imposing taxation or increasing taxation, and emphasising its extraordinary character. Pro-
vision was also made to ensure that administra-
tion cane should be treated on exactly the same
footing as colono cane: otherwise the mills
would, of course, have cut the whole of their
administration cane, and thrown the burden
of the restriction on to their colonos. This
comprised the very simple and straightforward
restriction of the 1925-26 season. The crop
was estimated by the Secretary of Agriculture at
5,200,000 tons: a 10 per cent. restriction should
have resulted in a crop of 4,680,000 tons.

The Verdeja Act was not, however, con-
cluded with the decision of the larger American
mills with their plentiful financial resources. The prohibition of
grinding before a definite date embodied a reform long desired by many, and especially by the larger American mills. Normally the mill has to make advances every fifteen days during the growing season to its colonos to enable them to pay the wage-bills and other expenses of the growing crop: when the harvest begins, and the colonos send in
their cane for sale, the mills first write off the
accumulated debt of each colono, and the colono actually receives in cash only the balance, if any. In turn the mills in most cases have to borrow from the banks and merchant houses the wherewithal to make these advances required by the colonos during the
growing season. Now the custom had de-
veloped for the banks to refuse to make any
advances to the mills after January 1st except on actual new crop sugar produced. Thus unless
a mill had cash in hand, it was bound to grind
a quantity of cane before January 14th to
provide a basis for borrowing to supply the
advances required by its colonos on that
date, and the advances required would be much
more than the ordinary January advances be-cause the commencement of grinding
would mean a big increase in the colonos
wage-bills. Thus some mills would find it
necessary to begin grinding as early as mid-
December, and if one mill in a district starts
grinding its neighbours must do the same in
order to retain their fair share of the local
labour force. This early grinding is in a normal
season very wasteful, for the cane is not really
ready until mid-January at the earliest: the
sugar content, which averages 10 per cent. in
the first half of January, will rise to 12 per
cent. in the first half of February. Thus the
mills which had no need to start grinding early,
but were forced to do so by a needy neighbour,
had a grievance, and this was especially true
of the Verdeja Act, should be looked upon, not
so much as a measure of restriction (for the
date fixed were to involve, say, a month’s
extension, the output decreed through the group
case, provided the weather continued to
be favourable), but as a reform introduced at the
Cuban Government’s own request.
VII.—THE RESTRICTION OF THE 1926-27 CROP.

The price of sugar was not immediately raised by the imposition of restriction, though it is at least probable that without it 2 cents would have been reached again by midsummer 1926. On September 7, 1926, world stocks, including the Cuban interior carry-over, amounted to the enormous figure of 2,057,000 tons as compared with 1,612,000 on September 1, 1925, exclusive of the Cuban interior stocks. Whether there were appreciable interior stocks in September 1925 is unknown, but there could hardly have been more than 200,000 tons. On this basis, consumption may be put at 24.5 million tons in 1925-26, an increase of a million tons on the previous season, production having reached 24.1 million tons. But prices now began to show a sharp recovery. On September 21 the Cuban Presidential decree No. 1955 prohibited the commencement of grinding before January 1, 1927. The preamble to this decree states that this decision "has been expressly approved by the majority of the mulleners and the representatives of all the planters, which approval was given in the name of the above by a Special Committee of the National Association of Planters." It defends not only the legitimate interest of the colonos to obtain the greatest yield from his cane, provided the weather allowed grinding to continue to completion, but rather as a salutary reform introduced at this time because the Cuban Government saw therein a means to placate American opposition to their policy of restriction. The fact, however, remains that the introduction of a later date for grinding does, of course, relieve the pressure of excessive supplies on the market at the time of its introduction.

With the new crop supplies from Cuba, prices eased off, but a 3 cent level was maintained from March to May. Consumption in the U.S.A. was, however, lagging in a very disappointing fashion, while in Great Britain the effects of the industrial troubles of 1926 were reinforced, from the importing point of view, by the growing volume of domestic production. Stocks were piling up in Cuba to an alarming extent. By July 1 the price was down to 22 cents, and there was still 2 million tons of sugar in Cuba, counting interior stocks, just as there had been a year before, though then the price was nearly 4 cent lower. By October these stocks had been reduced by half, as had also happened the year before, but this time it had not been accomplished to the tune of substantially rising prices. The trouble in 1927 was no longer excessive production. Production, thanks mainly to the weather, was far below estimates in Europe and Java, and to restriction in Cuba, showed a decline of nearly 1 million tons to
236 million tons. The trouble was that consumption had come to a complete halt. On
the assumption made above, that there may well have been 200,000 tons carried over
consumption had come to a complete halt. On
the assumption made above, that there may
have been 200,000 tons carried over on September 1,
and if consumption had increased by only half a million tons, the situation would
have been immensely relieved. It must be
judged a stroke of very hard luck for Cuba that
the opportunity of short crops elsewhere was
snatched from her by the apparent unwilling­
ness of the world, and especially of Europe and
the U.S.A., to consume more sugar. Should
this continue, the outlook was exceptionally
black. Java had increased her crop by nearly
half a million tons, and the new cane, with its
reported 30 per cent higher yield, had done so
well that practically the whole island had been
planted with it, so that a further large increase
was likely in 1928. The area under beet in
Europe had been greatly extended, and the
prospects were extremely favourable. The
cane plantings and yields of the world,
especially from the protected territories of
Hawaii and Porto Rico. Cuba must clearly
either intensify her restriction considerably, or
she might just as well abandon it altogether.
Cuba chose the former, for at least it was true
that prices were higher than they had been before restriction.

It is extremely doubtful, however, whether
this choice commended itself to a majority of
the Cuban people. The purely Cuban mills
certainly approved, though they were be­
inning to lose heart and hope of any speedy
return to prosperity by way of restriction or any other means. On the other hand, the
American interests had become much more
solidly opposed to restriction, with the excep­
tion of the important Rionda group. This was
largely due to dissatisfaction over mill assess­
ments. The simplest method of assessment
would have been to take the output of each
mill in 1924-25 and reduce them all by a uniform percentage. This method was strongly
urged by the Rionda group, but it met with
violent opposition by the two bank groups and
other companies which had made extensive
new plantings for the season 1925-26. It was
another example of a difficulty common to all
cartel organisations, namely, the objection of
new producers to any scheme of restriction
based on past performance. The Cuban
Government decided, therefore, that each mill
should send in estimates of its productive
capacity for the coming season, which would
then be approved or revised. This method of
assessment provides unlimited scope for accusa­
tions of favouritism, and for general complaints
and discontent. In ordinary Cuban business
dealings, as well as in politics and in the oper­
ations of the Government Departments, there is
what would be termed by Englishmen wholesale
bribery and corruption, and it is so regulated by
custom and unwritten but well-recognised
standards, that its net effects may easily be
over-estimated. The distinction sometimes
made by the citizens of a neighbouring country
to Cuba, between "legitimate" and "illegitimate"
graft, applies very strongly in Cuba, though it receives less attention in ordinary
conversation! Anyone with only a casual
knowledge of Cuban life might have expected
that prices were higher than they had been before restriction.

The essential features of the Cuban mill assessment
system are these: an estimate of the productive
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administrative difficulties, such as were encountered, for example, in the British rubber restriction scheme, though, of course, sugar prices never became so tempting as rubber prices. But naturally some irritation and discontent were aroused, and duly exploited by those American interests which were from the start opposed to restriction.

To return from this digression, the American mills would probably have shown a large majority against any intensified restriction, and so the industry by itself could probably never have taken the step. It was really the Cuban Government which took the initiative at this stage. As has been said above, their point of view was dominated by the desire to prevent the closing down of any appreciable number of mills. Even if the increased costs of a restricted output meant small profits, and therefore only a small Government revenue, at a price of 21⁄2–3 cents, yet without restriction prices would probably have continued at the 2 cent level, which would have meant a still smaller Government revenue, and, through the closing down of many mills, an army of hungry unemployed. Restriction was at any rate more desirable, as it would allow Cuba to keep her head above water; and it was the right policy, and for Cuba to return to unrestricted production, and to add another 1 million tons of sugar to an estimated surplus production of 11 million tons in the season 1927–28, seemed madness.

VIII.—THE RESTRICTION OF THE 1927–28 CROP.

The essential features of the plan devised at a conference of the Cuban President and other Ministers were known to the world at the end of the first week in September, but the law embodying their proposals was not passed until October 4, 1927. This Sugar Defence Law may be summarised as follows:

1. Appointment of a National Commission for the Defence of Cuban Sugar, consisting of 5 members, to advise the President in the discharge of his duties under the law.

2. After the Defence Commission has prepared estimates of the quantity of Cuban sugar required by Cuba itself; (b) by the U.S.A.; (c) by the rest of the world, the President is given power to fix the total amount of the Cuban crop, and its due proportional distribution among these three headings. The President is also empowered to fix the production quotas for each mill, and any sugar produced in excess of the quota shall be subject to a tax of 50¢ per bag; at the same time he would fix for each mill the percentage of its quota which might be exported to the U.S.A.

3. Appointment of a Cuban Sugar Export Corporation to market all sugar in excess of the production quotas for each mill, which would thus be free to market its output without restriction, and any sugar produced in excess of the quota which might be exported to the U.S.A.

The mills were thus to be free to market their production quotas for each mill, and any sugar produced in excess of the quota shall be subject to a tax of 50¢ per bag; at the same time he would fix for each mill the percentage of its quota which might be exported to the U.S.A.

Such were the outlines of the new scheme. The National Commission was quickly appointed, with Colonel Tarafa as the Chairman. Tarafa plays such an important part during the next two or three years that a word or two must be said as to his position and personality. He is said virtually to own Central Cuba Sugar Company, which owns four mills in Matanzas, though the actual production has now been concentrated into two of them. He is a director, and is said to have very extensive interests in the Cuba Company, which is a holding company controlling the Consolidated Railroads of Cuba and the Compania Cubana, which owns two large centrals. Tarafa acquired his reputation primarily as a railway man, and his advocacy of the legislation whereby the shipment of sugar was prohibited except from recognised ports, thus forcing the centrals to use the public railways when they might otherwise have built direct lines to the coast.
and put their sugar on shipboard at a much lower cost, did not endear him in certain quarters. Anyone studying the part he has played in the Cuban control of sugar might suppose that he was a sort of Cuban national hero and popular leader : the reverse is nearer the truth. The Cubans both distrust and fear him. They distrust him because they feel he has too much influence with the Cuban President for one who is so definitely interested in sugar and in railroads carrying sugar, and in particular because it is commonly believed that he uses his inside political knowledge to "play" the New York Terminal market. At the same time they also fear him because of his cleverness and ability. He is undoubtedly a man of big ideas and restless energy, who has the ambition of an American business leader, and as such he towers above the Cuban politicians. The President came to lean on him more and more, probably because he felt that Tarafa was the only man capable of pulling this very difficult and complex business of restriction through to a successful conclusion.

No one can say whether his compatriots are right in thinking that he plays solely for his own hand, but it is significant that there are several Americans in the trade who feel that he is more disinterested than they give him credit for. He has been an American by birth, and foreigners perhaps understand him better than the Cubans.

Under such a chairman the National Commission set about studying the statistical position and prospects with a view to advising the President as to the limitation of the coming crop and its distribution. Its first definite action, however, was as its alter ego the Export Corporation. On October 1, 1927, stocks in Cuban ports totalled nearly 700,000 tons, while there was still half a million tons in the interior. The President, therefore, exercised his power, under heading 4 above, to transfer 150,000 tons to the Export Corporation. The Corporation sold the whole quantity on October 13 to a referee in Great Britain at a price equivalent to about 233 cents f.o.b. Cuba. The price then ruling in the New York market was equal to 279 cents f.o.b. Cuba. Naturally this transaction attracted a good deal of attention and some dismay amongst the European beet exporters. Even allowing for some discount on such a huge purchase, the price was quite definitely a "dumping price" and it is perhaps not extravagant imagination to suggest that this sale was partly intended as a suitable prelude by Cuba to the consequences which were shortly to be arranged with the European beet producers: in other words that, Tarafa desired to give them a taste of what was to be expected from Cuba under his new regime. For within a few days Tarafa was on his way to Europe to try and ensure that restriction in Cuba should not be neutralised by increased beet crops.

During the second week in November, representatives of the sugar industries of Czecho-Slovakia, Germany and Poland conferred with Tarafa in Paris. The official programme of these conferences was to discuss the effect which the sugar industry of the other countries "will henceforward support the policy of Cuba to normalise and stabilise relations between production and consumption of sugar throughout the world. An International Sugar Committee will be formed, comprising two delegates of the sugar industry of each country represented on the conference, and of those countries which shall subsequently join the Committee, whose principal function will be the regulation of the production and consumption of sugar throughout the world. The ratification of the general agreements will take place during the present month." The draft scheme thus agreed upon provided that the three European countries should take all possible steps to increase consumption in 1927-28, and should regulate sowings for 1928-29 on condition that Cuba restricted its 1927-28 crop to 4 million tons. The Committee was to prepare the way for a full conference in October 1928, when Cuba was to table detailed proposals for the regulation of the production and distribution of each country's crop. Any surplus production was to be placed in the hands of an international company or deducted from the 1929-30 quotas, while a deficit in one country's export quota was to be added to the quotas of the others in proportionate shares. Cuba, however, admitted the principle that her contribution to the common sacrifice should be proportionately heavier than that of the other countries, since her export was so much larger and she was therefore most affected.

This seemed a very excellent start, and Tarafa proceeded from Paris to Amsterdam. There, however, he found himself running against a brick wall. The directorates of most of the Java sugar companies are in Holland, and the directorate of the central marketing organisation - the Java industry is, in fact, controlled from Holland. The Dutch made it quite clear that they did not feel the pressure of present prices to be so severe as to warrant any consideration of restriction measures: when the price fell below 2 cents they might begin to think about it, but at 2½ cents and above they were satisfied that they could carry on, especially since the 30 per cent. higher yield of beet sugar is greatly reducing their costs. The Dutch were determined that the expansion of consumption of beet sugar in the export markets of the Far East should not be allowed to show any such slackening as had been experienced in the U.S. and Canada.

Tarafa, however, was determined to take the sugar with Cuba with as much effect as possible even if it had to be abandoned. It will perhaps be remembered that when the Paris Convention last met in 1926, the restrictions had apparently been fixed to ensure that 1927-28 production should not exceed 1926-27 production. It was determined that the restriction regulation of these countries should last till December, and in January 1927, which fixed the export during 1926-27 at 10,224,950 tons, which Czecho-Slovakia, Germany and Poland demanded to be reduced 100,030 tons, or Germany's 95 per cent. Tarafa was at the root of the idea to be held with Cuba in the coming crop to try to secure that this was done. New quotas were to be arrived at on the basis that the 1,159,000 tons were equivalent to 5 per cent. of the total European export in the previous year. The export during 1927-28 was set at 1926-27 crop production, which was the immediate previous crop in which the reduction did not reach the 100,030 tons degree of restriction.

Tarafa was on his way to Europe to try and ensure that restriction in Cuba should not be neutralised by increased beet crops.
tive shares. Any increase in the hands of the
United States, Canada, and Northern Europe
were really prepared to pay, and much less
than a single seller would have
to sell freely and which they
shall deliver to the Export Corporation.

It will be convenient to examine first the
theory of the scheme, then its mechanism,
and then its actual operation and the results.
At first sight it appears as though the scheme
was exactly the opposite of what it should
have been. A seller with a local monopoly
devotes all his attention to a careful regulation
of sales in his protected markets, and does not
bother much about the surplus except to get
rid of it quickly. Under the Cuban scheme,
however, the U.S. market, protected from
dumping of the surplus was to be carefully
regulated through the medium of a single
selling agency established for the purpose.
But the analogy is not sufficiently correct:
a monopolist dumping his surplus production
is still a single seller, whereas if the Export
Corporation had marketed to the U.S., leaving
individual producers to dump the surplus,
there would have been many sellers scrambling
together to get rid of their sugar, and buyers
would have played them off against each other,
with the result that the prices secured
would have been much less. Here were
similarities, but also important differences.

The requirements of the U.S. are
estimated at 150,000 tons more than in
1927, viz. 3,900,000 tons. Of the new
crop, 3,050,000 tons to be earmarked
for the U.S., the balance being the
250,000 tons of old crop sugars.
4. To be earmarked for Cuban domestic
consumption 150,000 tons.
5. To be earmarked for sale outside the
U.S. and Cuba by the ExportCorporation 600,000 tons.
6. The remaining 200,000 tons to be constituted a reserve, and held by the
Export Corporation pending instructions to sell from the President, which
instructions will only be given “in case of
evident need,” and if not sold, this
reserve to be carried over for consump-
tion in the year 1929.
7. The National Commission to make
recommendations to the President as to
the quotas for each of the mills, and
the amounts which they shall be
entitled to sell freely and which they
shall deliver to the Export Corporation.

It will be convenient to recount
briefly the subsequent history in Europe.
Tarafa, however, was able to return to
Cuba with apparently solid gains from Paris
even if he had added nothing in Amsterdam.
It will perhaps be convenient to recount
briefly the subsequent history in Europe.
But Czecho-Slovakia, Germany and Poland
had apparently been fired by Tarafa’s gospel
of restriction and regulation, and representatives
of these countries met again at Prague in
December, and in January signed a pact at
Berlin, which fixed the combined total for
export during 1928-29 at 1,150,000 tons of
which Czecho-Slovakia’s quota was to be
60 per cent., Poland’s 17½ per cent., and
Germany’s 16½ per cent. If this total export
figure was raised as the result of the conference
to be held with Cuba in October 1928, these
ratios were to be preserved; but if the figure
was reduced, new ratios were to be negotiated,
while it was provided that such a reduction
must be unanimously approved. It was also
expressly laid down that, these arrangements
would not remain valid if no agreement was
reached with Cuba in the autumn. It may
be observed that this total for export of
1,150,000 tons was approximately the same
as the quantity exported in 1926-27, when the
total European crop was under 7 million tons,
while the 1927-28 crop exceeded 8 million tons,
which was the immediate pre-war level. The
scheme was accordingly to involve a substantial
degree of restriction.

Thus though the agreement appears of a
somewhat contingent character, it contained
definite possibilities from Cuba’s point of view,
and it was clear that Europe kept moving even
after Tarafa’s return to Cuba. In order to
clear out all stocks, the commencement of
grinding was postponed until January 15, 1928.
On the 21st, a presidential decree was passed
to give effect to the National Commission’s
decisions in regard to the size and distribution of
the crop. These may be summarised as follows:

1. Crop to be limited to 4 million tons.
2. The remainder of the unsold stocks of
the 1927-28 crop, amounting to 250,000
tons, to be sold only in the U.S. (i.e. by
the owners under ordinary marketing
methods).
3. The requirements of the U.S. are
estimated at 150,000 tons more than in
1927, viz. 3,900,000 tons. Of the new
crop, 3,050,000 tons to be earmarked
for the U.S., the balance being the
250,000 tons of old crop sugars.
4. To be earmarked for Cuban domestic
consumption 150,000 tons.
5. To be earmarked for sale outside the
U.S. and Cuba by the ExportCorporation 600,000 tons.
6. The remaining 200,000 tons to be constituted a reserve, and held by the
Export Corporation pending instructions to sell from the President, which
instructions will only be given “in case of
evident need,” and if not sold, this
reserve to be carried over for consump-
tion in the year 1929.
7. The National Commission to make
recommendations to the President as to
the quotas for each of the mills, and
the amounts which they shall be
entitled to sell freely and which they
shall deliver to the Export Corporation.

It will be convenient to examine first the
theory of the scheme, then its mechanism,
and then its actual operation and the results.
At first sight it appears as though the scheme
was exactly the opposite of what it should
have been. A seller with a local monopoly
usually endeavours to exploit his protected
markets up to the hilt, and disposes of the
remainder of his production wherever and at
whatever prices he can: in other words, he
devotes all his attention to a careful regulation
of sales in his protected markets, and does not
bother much about the surplus except to get
rid of it quickly. Under the Cuban scheme,
however, the U.S. market, protected from
the surplus was to be carefully
regulated through the medium of a single
selling agency established for the purpose.
But the analogy is not sufficiently correct:
a monopolist dumping his surplus production
is still a single seller, whereas if the Export
Corporation had marketed to the U.S., leaving
individual producers to dump the surplus,
there would have been many sellers scrambling
together to get rid of their sugar, and buyers
would have played them off against each other,
with the result that the prices secured
would have been much less. Here were
similarities, but also important differences.

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obtained. The theory behind the Cuban scheme was that the U.S. could be counted upon to take a certain amount of sugar at a price which would include a substantial proportion of the 44 cents tariff differential, and that therefore what was required was to make provision for disposing of the balance of the crop without unduly depressing world prices, in order to eliminate the disastrous effects of competitive dumping. The theory of the Cuban scheme was reasonably sound, but its inevitable rigidity was a fatal weakness. It is clear that for success the U.S. demand must be gauged to a nicety, and this had to be done for a year in advance. Such an estimate involves, of course, an estimate of the U.S. domestic and duty-free supplies, and while the beet crop can be gauged satisfactorily by December-January, the cane crops of Hawaii, Porto Rico and the Philippines cannot. Apart from the difficulties of making such an estimate, it is obvious that buyers might postpone their demands for a few months by living on invisible stocks, and this might lead to price concessions by competitive sellers eager for cash. Yet under the scheme the making of a definite estimate is inevitable. The weakness of rigidity comes out even more clearly, however, in the pre-determination of the total crop, and the allotment of a definite quantity for export other than to the U.S. On January 21 the rest of the world knew that Cuba was counting on selling them a definite quantity. A monopolist dumping his surplus production is usually able to conceal from his customers the exact size of that surplus, but under this scheme Cuba had definitely to publish such information in advance. She thus put herself in the same position as a street vendor with all his goods displayed upon his barrow, and if the citizens can control their hunger and thirst until the evening, they will be able to buy cheaper. The world's visible stocks of sugar on January 1, 1928, alone amounted to over 4 million tons, and in addition there were refiners' and middlemen's stocks, which in the aggregate must always make an appreciable total, and which could be allowed to decline far below the normal level when, as now, new supplies could be immediately obtained at steadily declining prices. There was, in fact, every incentive under the scheme for the rest of the world to sit tight until the Export Corporation was glad to make sales at any price. That this did not, in fact, happen to any great extent in the 1927-28 season was due to the lack that consumption in the rest of the world resumed its forward march with surprising vigour. The inevitable rigidity of the scheme, whether as regards the U.S. or the rest of the world, was a very serious weakness. From Cuba's point of view it would obviously have been far better if the whole crop had been handled by the Export Corporation, and the less information the world was given about the Cuban Corporation's plans as to the price of the crop or its distribution, the better. Such a course would have been impracticable, at any rate at that time. For if the Corporation had handled the whole crop, arrangements would have had to be made to finance the mills pending the sale of the sugar—a problem which will receive attention later, since it was to prove so difficult as to wreck the Single Selling Agency which was eventually established. As it was, the mills were free to market nearly three-quarters of their production, and were thus able to finance themselves in the ordinary way. Moreover, such a scheme would have increased the opposition of the American mills, especially those shipping direct to the refineries which owned them, at a time when Cuba desired to conciliate and convert them to its general policy of restriction. The greater secrecy would probably have led to suspicions by the European beet producers, whereas under the actual scheme everything seemed so straightforward and above-board.

The mechanism of the scheme was as follows: Each mill received warehouse receipts for its authorised crop; so many blue slips for sugar which it was free to sell to the U.S., and so many pink slips for the sugar it was not free to sell, and which had to be held pending instructions from the Export Corporation. The pink slips, however, were negotiable receipts, and could be transferred to other ownership; the Corporation making payments direct to the person presenting the recep.
or even a large number. The Corporation therefore fulfilled its contracts from the most convenient and economical sources in each case, subject to the limitations of storage capacity at the different mills. Naturally attention was paid to the preservation of a roughly equal treatment so far as this was compatible with economy and the storage factor, and eventually an arrangement was made whereby those producers whose reserved sugar was sold by the Corporation before June 1 paid interest, which was passed on to those whose sugar was not sold till later. The whole mechanism so far as the producers were directly concerned appears to have worked both economically and smoothly.

For the purpose of making its sales, the Export Corporation maintained a sales office in Havana. The Corporation was perfectly willing to deal with buyers direct, but in general the latter continued to make use of brokers for the usual reasons of secrecy, the advantage of a third party in the event of arbitration, etc. The broker would hand in a bid at the Corporation's office, and the Corporation would then either accept or reject it. If accepted, the Corporation had the right to demand a deposit of $1 per bag as security that the sugar would not be diverted, while on the high seas, to U.S. ports, the amount being returned on production of the landing certificate. But this requirement was never actually enforced, since the firms which bought sugar from the Corporation were all well-established responsible concerns whose word could be relied upon. In the main this mechanism worked satisfactorily, and the only issue of importance so far as this was whether it would have been advantageous for the Corporation to quote a price and offer to sell, instead of waiting for bids. It cannot be said that the actual course of events suggests that this would have been desirable, but it is clearly possible for a situation to develop in which the two sides actually enforced, since the firms which bought sugar from the Corporation were all well-established responsible concerns whose word could be relied upon. In the main this mechanism worked satisfactorily, and the only issue of importance so far as this was whether it would have been advantageous for the Corporation to quote a price and offer to sell, instead of waiting for bids. It cannot be said that the actual course of events suggests that this would have been desirable, but it is clearly possible for a situation to develop in which the two sides

...
the U.S. demand was being satisfied without
the expected call on Cuba, may be said per-
haps to have sat back until Cuba was willing
to let it go pretty cheap. When, on July 19, it
was announced that the whole quantity had
been sold to British refiners at a price equivalent
to 2.34 cents f.o.b. Cuba, the world was not only
staggered at the magnitude of the transaction,
but also at the apparent desperation of the
Export Corporation. It certainly seemed as if
these refiners had made a good bargain, but, as
events were soon to show, it was, in fact, a very
good bargain from Cuba's point of view. At
the time it seemed a terrible sacrifice by the
Cuban industry, but prices, even for trans-
actions of normal size, have yet to regain that
level; and if that 300,000 tons had remained
unsold, the situation would have been even
more desperate than it actually became. It
may be argued that this large scale was itself
responsible for the subsequent decline in price,
in that it filled the requirements of exporters
for some time ahead: in other words, that
Cuba might have been able to sell this amount
during the next three months in small lots at
a higher average price than that obtained in
the single transaction. It is probably not
desirable in the ordinary way for any seller to
make single transactions of these proportions,
because buyers are thus made independent of
the market for periods too long to be healthy
from any point of view. But in the particular
case now under consideration buyers were
already holding back, knowing that this sugar
must shortly be sold, and it was in the best
interests of Cuba to end such a condition of
affairs as quickly as possible. The Export
Corporation in this matter executed a bold and
clever stroke, and thereby rounded off
sugar industry might have been proud. Both
Cuban and American producers, as well as
the big New York brokers, are agreed that,
given the whole scheme of control, upon
the merits of which there is, of course,
disagreement, the Export Corporation per­
circumstances be of the nature of positive gains.

The assertion that the British refiners who
purchased so much sugar at this price made a
bad bargain must be understood as meaning
only that if they had waited a little longer they
could have got it much cheaper. Whether they
could have waited is a question which they alone
can answer, and especially in view of the current
relatively small available stocks of raw sugar in
Great Britain, it may be that they could not, and
that from their point of view the transaction
was eminently justifiable. Nevertheless, it does
not appear that they were sufficiently well-informed
as to the change of public opinion in Cuba
regarding the regulation of the sugar industry.

During the spring of 1928 Cuban opinion began
to swing rapidly and heavily against the whole
policy of restriction. Local factors carried
weight in an island like Cuba, whose inhabitants
think of the rest of the world only in terms of
sugar, and there were two such local factors in
particular which turned them against restric-
tion. The first of these was the realisation
that the cane left uncut in the previous
seasons was getting dried up and useless, and
this seemed such a terrible waste after all the
money which had been spent in cultivating it.
The second was that the working people who
should have been employed in harvesting were
unemployed, and therefore suffering want.
Moreover, a 21 cent price level meant profits
only to a very few of the largest and most
modern American mills, for the drastic restric-
tion of more than 20 per cent, meant a con-
siderable increase in costs of production, and
therefore it was easy to forget that without
restriction prices as well as costs would have
been lower, and to argue that losses might even
be smaller, and things in general no worse, if
restriction was abandoned. It was indeed a
most debatable point. Restriction had not
only failed to raise prices or even stop their
fall, but it seemed as if the other sugar-
producing countries of the world had taken
advantage of restriction by Cuba to effect a l^ge
increase in their production. Tarafa might
two such local factors in particular which
would have set to the course of prices in justiﬁcation of their attitude.
The creation of the Export Corporation had
brought the refiners owning sugar mills into open
opposition as well as the groups controlled by
the two banks, for the refiners naturally
objected to the compulsory diversion to

Europe of 39 per cent of the Cuban sugar
production of 1929, by virtue of the
new terms of the 1928-29 agreement, which
were not only far from suitable to the
Cubans, but especially to the American
producers. Tarafa, the American opponents of
the Export Corporation, were also able to

The only restriction on the

prohibition of grading

and some of the American

Europe of 30 per cent. of the restricted production of their mills. But it was the allotment of quotas for 1928-29 which most displeased the American interests. This was perhaps partly natural in view of their all-round reduction, though there is still no evidence of serious discrimination. But in March a decree was issued providing that every planter and mill with administration cane should leave 10 per cent. of good cane uncut, unless they got a dispensation from the Sugar Commission. The Sugar Commission had apparently come to the conclusion that many mills had exaggerated their estimates of cane available in order to get higher quotas. By putting on this further restriction, the Commission obtained direct supervision. No hardship was inflicted, for any mill could claim that it had insufficient cane to meet its quota and yet leave 10 per cent. uncut, and after investigation the case could be dealt with on its merits. But it naturally infuriated any mills which thought they had been clever in submitting excessive estimates, while all felt that, having tied their hands, it was indecent to tie up their arms as well. There seemed, in fact, to be no limit to what the President would allow Tarafa to do, and no knowing what the President's personal views made removal a virtual certainty, and the decline in price was at once accentuated. The average monthly New York c. and f. prices were as follows: May 2¢68, June 2¢52, July 2¢41, August 2¢38, September 2¢22, October 2¢14, November 2¢09, December 2¢16. It seems only common sense to suppose that if the Cuban Government, whatever their private conclusions, had bluffed vigorously to the outside world and kept up every appearance of faith in restriction until the last possible moment, buyers would have remained in doubt, and would therefore have paid better prices than they did in fact do, and bought the same quantity, for world consumption in 1927-28 increased by nearly 1§ million tons, and was so nearly equal to world production that the carryover on September 1, 1928, was less than 100,000 tons greater than in 1927. As it was, Cuba gave away more than 1 million tons of the restricted 1927-28 crop at, so to speak, non-restriction prices. There was no possible advantage in announcing the end of restriction until January 1929 at the very earliest, and the losses on the 1927-28 crop might have been very sensibly diminished if the President had not apparently lost his head when faced with the American ultimatum, for an explanation along the lines that the Americans would be bigger losers in the aggregate than the Cubans, and that the President acted in a spirit of petty revenge, is a little too ingenuous.

IX.—THE UNCONTROLLED CROP OF 1928-29.

The only restriction on the 1928-29 crop was the prohibition of grinding before January 7, and though some of the American mills desired to begin earlier because they feared a shortage of labour for dealing with an unrestricted crop, owing to the Cuban Government’s restriction were equally hopeless. Tarafa in utter disgust resigned not only the chairmanship of the National Sugar Commission, but all his public appointments, and retired to the country, leaving the Americans, so to speak, in possession of the Presidential Palace.

The handling of this reversal of policy could hardly have been worse. Even if he had in his own mind decided to end restriction, the President should have refrained from publishing the fact to the world at an unnecessarily early stage, and the American business men who provoked his action, acted very foolishly, unless they thereby made on the speculative market more than they undoubtedly lost, and lost quite needlessly, on the subsequent sale of their sugar! The removal of restriction in Cuba meant roughly another 1 million tons increased supplies, and therefore the greater the prospect of removal, the lower the marking down of the price of sugar. The publication of the President’s personal views made removal a virtual certainty, and the decline in price was at once accentuated. The average monthly New York c. and f. prices were as follows: May 2¢68, June 2¢52, July 2¢41, August 2¢38, September 2¢22, October 2¢14, November 2¢09, December 2¢16. It seems only common sense to suppose that if the Cuban Government, whatever their private conclusions, had bluffed vigorously to the outside world and kept up every appearance of faith in restriction until the last possible moment, buyers would have remained in doubt, and would therefore have paid better prices than they did in fact do, and bought the same quantity, for world consumption in 1927-28 increased by nearly 1§ million tons, and was so nearly equal to world production that the carryover on September 1, 1928, was less than 100,000 tons greater than in 1927. As it was, Cuba gave away more than 1 million tons of the restricted 1927-28 crop at, so to speak, non-restriction prices. There was no possible advantage in announcing the end of restriction until January 1929 at the very earliest, and the losses on the 1927-28 crop might have been very sensibly diminished if the President had not apparently lost his head when faced with the American ultimatum, for an explanation along the lines that the Americans would be bigger losers in the aggregate than the Cubans, and that the President acted in a spirit of petty revenge, is a little too ingenuous.
immigration from Haiti, the more sensible majority prevailed. But any feelings of relief which producers may have entertained in the summer of 1928 at the prospect of no restriction, soon gave place to utter dismay. By the end of January 1929 the New York c. and f. price was below 2 cents, and there seemed no reason why the mills were underbidding each other in a thoroughly disorganised and reckless manner. The fall in prices was frightening the Americans, but it was really terrifying the Cuban mills. As early as mid-January, proposals had been put before the Planters Association by some of the members to establish a Single Selling Agency, and so remedy the “weak selling,” but this was heavily defeated. By March, however, many of the big American interests had come to the conclusion that the Cuban Government, either on its own initiative or at the instigation of the Cuban mills, would shortly take a hand again in the game. How far the Americans felt that something must be done to relieve the situation, cannot be definitely stated, but on one thing they were certainly agreed, namely, that if anything was to be done, it was not to be done by the Cuban Government. Hence the formation in March of a Joint Foreign Sales Agency by most of the important American concerns, should probably be regarded not so much as a genuine attempt to remedy matters, but far more as an attempt to forestall any action on the part of the Cuban Government. The prime mover in this scheme was Manuel Rionda. He had all along been a supporter of restriction, and with a lifelong experience of both the commodity and speculative sugar markets, he probably realised as well as anybody the unnecessary loss which was being caused by the disorganised weak selling of the mills in their urgent need of cash. But it must also be said that as a speculator he had probably been none too well pleased with the apparent ascendency of Tarafa over the President, fearing that Tarafa once more appears establish his supremacy, is difficult to say.

The promoters of the Syndicate, however, certainly failed in their major objective, which was not so much to improve the price of sugar as to forestall any intervention by the Cuban Government. It had, in fact, the very opposite effect to that desired, for the Cuban Government was piqued by what they conceived, and more or less rightly, to be an attempt by a group of foreign capitalists to restrain them from the exercise of their sovereign powers. Moreover, public opinion was once more beginning to demand that the Government should make some attempt to save Cuba from the impending disaster which a continuation of the decline in prices would inevitably precipitate. Whether the Cuban President re-established friendly relations with Tarafa and blessed his mission to New York, or whether Tarafa took the initiative, and having gained a measure of support, established his supremacy, is difficult to say. But the point is not of importance compared to the fact that Tarafa once more appears
upon the scene and quickly walks to the centre
of the stage. It is probable that, but for
American opposition and the difficulties of
finance, Tarafa would have tried to establish
a Single Selling Agency for the whole crop in
1927-28, and that the Export Corporation
was in his eyes always a poor second best to
complete unified control of marketing. The
idea was by no means novel even then: it
had been talked about for years. Now, in
1929, Tarafa had a trump card in his hand, and
he played it for all it was worth in an
attempt to rally the American and the Cuban
interests under his flag. It has been said that
the one common bond between the Cuban and
the American mills, and also between the
various divergent American interests, is their
common desire to lower the American tariff
on sugar. The tariff is the one, and almost
the only, rallying-point for the industry as a
whole, and the tariff was due for revision
during the summer of 1929. Tarafa's trump
card was his argument that if a Single Selling
Agency was established, Cuba should be able
to raise the New York price above world
parity by the 44 cents of her tariff preference,
and that this should go far to placate the U.S.
domestic producers' campaign for a higher
tariff, which, with the New York price at
10-20 points below the 2 cent level, was
obviously likely to be extremely vigorous: at
the same time, if it did not placate them, it
would obviously weaken their case. Tarafa
presented this argument both in New York
and in Cuba, and preached it with great effect,
particularly to the Cuban-owned mills and the
Cuban Government, since in their eyes the
prospect of a substantial increase in the U.S.
tariff, with its consequent stimulation of duty-
free production, seemed to set the seal on the
doom of Cuba's sugar industry, and therefore
put Cuba's whole economic welfare. Tarafa
conducted his campaign with the greatest
effort and skill, and gradually worked up the
industry to a state of general agitation and
excitement. Eventually, at the end of June,
a meeting was held at which no less than
95 per cent. of the industry was present, and
a presidential decree was being prepared establish-
ing a Cooperative Export Agency, which
would take over all unsold stocks in Cuba on
July 31- and which would market all future
crops. On July 26 such a decree was signed
and published by the President, but the date
of commencement was fixed not for July 31
but for August 31. This was a somewhat
extraordinary change of plan. It may have
been that Tarafa found the necessary machinery
had not been finished and that postponement was
inevitable. Such an explanation is simple and
sufficient, but it is not the explanation which
has gained popular credence. The popular
explanation is that Rionda and several of his
American friends had very heavy bear accounts
on the New York terminal market, and that
if the Single Seller had been established before
July 31, they would have been badly
caught by the resulting rise in price before they
could liquidate: accordingly, they took the
President on a fishing party and there per-
suaded him to give them a month's grace!
Tarafa is said to have been furious when he
they had lost the ear of the President, and that
if they did not follow Tarafa's lead, he would
drive them with the Presidential whip. It
was better to show a bright face, and participate
in the proposed scheme rather than have no
say at all in the matter. The Cuban interests
disliked Tarafa and distrusted him, while
they entertained no great hopes of the success
of the scheme. Nothing, however, could be
worse than the existing situation, and so there
was no great harm in allowing Tarafa to experi-
ment, while he really did succeed in pre-
venting an increase in the U.S. tariff, that
would certainly be a great score. Though,
therefore, Tarafa gained so much support, it
was of a rather grudging and indifferent
caracter: there was not that whole-hearted
belief and enthusiasm which commands the
self-sacrifice needed to surmount great diffi-
culties and to withstand great strains.
Tarafa carried the resolutions of the
meeting to the President, who, under the
circumstances naturally promised to give
effect to the united desires of the industry.
Had there not been the direct issue of the
tariff to arouse such universal support for the
scheme, it is probable that Tarafa would have
persuaded the President to take the initiative,
but actually the President had only to give
effect to the virtually unanimous and definitely
declared wishes of the industry, and he must	herefore have been truly thankful to be able to avoid
any further responsibility. On July 20 Tarafa
issued a public statement to the effect that a
presidential decree was being prepared establish-
ing a Cooperative Export Agency, which
would take over all unsold stocks in Cuba on
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was informed of the change, though it may be observed that current rumour has not credited him with a heavy bull account on this occasion. This very delightful little story may or may not be true either in whole or part, but it well illustrates the preoccupation of the Cuban, and even of the American mind, with the doing on the New York terminal market, and their instinctive feeling that the explanation of any unusual development is to be found there.

Tara, however, had not by any means confined his activities to Cuba and the U.S. The fall in prices had frightened not only the Cuban sugar industry, but almost every producer in the world. Producers within the U.S. tariff wall were pinning all their faith and devoting all their activities to the raising of that wall still higher, but the European beet producers, since they already enjoyed almost unprecedented protection, or equivalent bounties, could hardly hope to solve their troubles in the same way. Led by Czechslovakia, which is by far the biggest exporter of beet sugar, the European producers were rapidly becoming convinced that some international control of exports was absolutely necessary. The Czech industry sent representatives to Cuba, and Tara was, of course, only too pleased to respond, and to facilitate the resumption of the negotiations which had so sadly come to a halt the year before. Eventually a long series of conversations and conferences was begun at Brussels in June, and continued at intervals. Tara was too busy to go personally, and Cuba's representative was Louis N. Perez, an extremely able man of sound judgment but without Tara's enthusiasm for controlled production and marketing, and without his driving-power.

Tara had, however, learnt his lesson in 1928, and he was not going to set too much store by agreements with Europe. Though it had been expressly stipulated that the Berlin scheme of export quotas would be invalid if no agreement was reached with Cuba for the 1928-29 season, yet Cuba felt that Europe had not played the game properly: Cuba had shouldered the whole burden in 1927-28, and Europe ought somehow to have eased that burden so that it did not break Cuba's back. In 1929 Tara felt that Cuba's position was much stronger. With the crop under centralised control, Cuba would be able to get the full 4c.4c. differential in New York, and even if the world price remained very low, she would not lose more than other producers. Europe had not been at all pleased with an unrestricted Cuban crop of 5·2 million tons in 1929, and if Europe was not careful the next Cuban crop would be bigger still. Hence Cuba was not supplicating Europe in 1929 as she had been in 1927-28, for, apart from the new weapon of the Single Seller, Cuba felt that the European beet producers had now shot their bolt so far as increased production was concerned: the highest pre-war crop had been equalled in 1928-29, restoration was complete, and further expansion seemed most improbable. What worried Cuba far more, was the possibility of further expansion behind the U.S. tariff wall, especially if it were raised higher. Any considerable increase in the U.S. beet crop seemed unlikely, and opinions differed as to the potentialities of the European beet crop. Europe had not been at all pleased with an increase of 1 million tons, but in 1929 the crop had been doubled since the 1922 tariff, and planting had been very heavy in anticipation of a higher tariff in 1929. But the leading politicians in the islands have long realised that when the Philippines gain their independence, the U.S. will impose a tariff on Philippine sugar, and that if a big industry is built up on the existing duty-free basis, serious trouble is likely to ensue if that basis is changed. Hence the Philippines were ready to discuss with Cuba a reasonable restriction of new planting. These discussions had the tacit approval of the U.S. Government, receiving the powerful support of Secretary Stimson, who used to be Governor of the Philippines. Negotiations were thus proceeding during the latter part of 1929, not only with Europe but also with the Philippines, and in Cuba the latter negotiations were considered by far the more important, and, moreover, the more hopeful.

Returning to Cuban home affairs, it may be observed that the campaign for the establishment of a Single Selling Agency and its successful issue in the decree of July 26, had been sufficient to raise the New York average monthly c. and f. price from 2·75 cents in June to 2·86 cents in July. The postponement of the date of commencement resulted in an average for August of 2·65, but for September it rose to 2·72 cents. On July 1, stocks in Cuba amounted to 2,992,000 tons; by October 1, there had been a reduction to 1 million tons. It is estimated that the Single Selling Agency took over about 1,700,000 tons of unsold sugar on September 1. During the 1928-29 season, world production had increased by about 4 million tons, considerably less than had seemed likely at the beginning of the season. The increase of 3 million tons in Java had been offset by a reduced crop in Canada, which increase is some other countries. The effect of the Agency on prices will be discussed later.
offset by a reduced crop in India, and small increases in some other cane-producing countries had been offset by small decreases in others, as, for example, in Porto Rico owing to hurricane damage, leaving only the net addition of 1 million tons from unrestricted production in Cuba, together with an increase of 80,000 tons in the European beet crop. Consumption at the very low level of prices had succeeded in swallowing over 14 million tons more, thus leaving a carry-over of 2.8 million tons, an unheard-of amount, but less than at one time might have been expected. Roughly one-half of these stocks were in Cuba. That the mere announcement of the establishment of the Single Seller Agency should have had such an effect in raising prices, when these enormous stocks were available, seems somewhat surprising, but the outlook was for no considerable further increase in production, while there was no certainty whatever that consumption would not shoot ahead and remove all the surplus stocks during the coming season. A price level of 13-14 cents f.o.b. Cuba, when world production and consumption were nearly in equilibrium, seemed low enough even if there were 14 million tons surplus stocks, and the announcement of the Single Seller just gave the impetus which the market required to raise prices to a level which would not, at any rate for a time, result in any drastic curtailment of supplies through the inability of producers to carry on.

* I.e. allowing 1 million tons as the normal level of convenience.


The launching of the Single Seller scheme was therefore most successful, and Cuban opinion was strengthened by the apparently concrete evidence of its power to terroise the buyers. By the decree of July 26 the President had appointed the Sugar Export Corporation, which had only been suspended and not actually dissolved the year before, to act as the Single Selling Agency, pending the organisation of the agency on the proposed co-operative basis. It was also provided that the President of the National Commission for the Defence of Sugar should be ex officio president of the new Co-operative Export Agency. Further, the President of the Republic reserved the right to veto or suspend the Agency's resolutions at any time that the resolutions of the board of directors might affect the stability and proper functioning of the Co-operative Export Agency or the international pledges and agreements which, for the benefit of the sugar industry, may be entered into by the Executive with other bodies or representatives of industries. Thus, however, should not be regarded as constituting the Export Agency a State institute such as the Export Corporation had been. The whole business of selling the sugar was entirely in the hands of the Agency, and for practical purposes the Presidential veto could only concern the quantity to be sold, either in the aggregate or in particular markets. The American interests had fought hard to restrict the Cuban Government's powers of intervention to a minimum, and on the whole they had succeeded, for though Tarafa may have desired more power for the State, the President and his Ministers were probably only too thankful to be excused.

In the ensuing elections to the board of directors, good care was taken to placate the American interests by giving them ample representation, and some of those who had at one time been the sharpest critics of the scheme, found themselves effectively muzzled by their election to office. The Cubans succeeded in keeping Tarafa off the board, and also Rionda, on the ground that they were interested parties. Indeed, it seems that mutual jealousies and fears resulting in the non-election of nearly all those men who by their experience were most fitted to perform the work which the Agency had to do. With one notable exception, the American representatives were the managers of American-owned mills in Cuba, and as managers they had had little to do with the marketing of sugar: that was not their primary job. The Cuban representatives were also quite inexperienced in marketing, compared with the Riondas or even Tarafa, and several others. It is indeed a great difficulty for nearly all raw material producing countries to find within their borders men who have first-class experience of the world's chief markets for their products, or even adequate knowledge of the many factors which are usually far away at the chief centres of consumption, and a man must make their study his life's work. A knowledge of the primary sugar market in Havana in so far as it can be said to exist, even of the world's markets as seen from Havana, is quite inadequate equipment with which to tackle the distribution of 5 million tons of sugar throughout the world at prices which must largely depend upon the seller's own actions. This generalisation applies
less to Cuba, with its close relations with the New York market, than to most countries, but the Cubans appear to have so distrusted their most experienced men that they preferred to dispense with their services.

The actual sales mechanism of the Export Agency was essentially the same as that of the Export Corporation for European shipments in 1927-28. Buyers had no option as to the mills from which their sugar would come, but they were accustomed to import direct from their own centrals, were allowed to express the wish that the order might be filled from their centrals, and naturally such wishes were in the main met. So far as possible the Agency was to try and maintain uniformity in the proportion of each mill's output sold to date, but as under the Export Corporation, this could not be done strictly without additional expense, and so those producers whose sugar was sold first, were to pay interest to the others — no scheme of equalisation was, however, applied in the case of the unsold stocks of 1926-27 sugar which had been taken over on September 1, as it was obviously unnecessary, and could not have resulted in fair treatment all round.

The whole scheme clearly depended on the solution of the problems of financing the mills. This included not only the financing of stocks at all stages, against growing cane, against sugar in process, and against actual sugar in warehouse. Under conditions of individual selling the lender could liquidate any sugar left on his hands by the failure of his planter, but as under the Co-operative Export Agency, the banks and merchant houses at all stages, against growing cane, against sugar in process, and against actual sugar in warehouse. Under conditions of individual selling the lender could liquidate any sugar left on his hands by the failure of his planter, but as under the Co-operative Export Agency, the banks and merchant houses could hardly be expected to lend with the same freedom as before, and for merchant houses to lend with the same freedom as before, and for

The only hope lay in the co-operation of the American banks, and all through the autumn the most strenuous efforts were being made to enlist their co-operation. Mention should also be made of the purely physical problem of holding large stocks. The centrals of the pre-war period were mostly built with sufficient storage space to meet all but the most abnormal requirements. But those built hurriedly during the war had very little, because in those years the sugar could not be shipped out fast enough. During the expansion 1922-24 a shortage of capital could not force the provision of facilities with which good luck might never be used. Similarly, the ports in the western provinces have always had ample warehouse capacity, but not so the new...
ones in Camaguey and Oriente. Considerable additions had been made during 1927–28, when the mills had to hold their sugar under the control of the Export Corporation. In 1929 there were storage facilities in Cuba for about 3 million tons. But it was still very unevenly distributed. While not a difficulty comparable with that of finance, this physical problem of storage might have greatly complicated matters for the Export Agency, and would certainly make the adjustment of returns as between sugar sold at different times, much more difficult than it would have been, if storage facilities had been ample and evenly distributed.

Though, as has already been observed, the mere announcement of the scheme had been sufficient to raise prices very substantially, the Export Agency was unable to make any large sales for two or three months owing to the considerable supplies already in second hands: these holders of actual sugar made very substantial profits at Cuba's expense, though this was, of course, unavoidable. The Export Agency did not, however, try and force further sales on to the New York market, and until the end of October the price was well maintained. By that time, however, opinion was hardening against the probable success of the scheme, since little progress had been made in the provision of the necessary financing arrangements. The Wall Street crash and the general fall in the prices of other raw materials also exercised a depressing influence. In November the Export Agency was refusing bids for substantial amounts by European importers, whose offers had been accepted in the light of subsequent events. But the Agency appears, right from the start, to have made the maintenance of the New York price-level a cardinal principle, and to have obstinately refused bids only a point or two lower. Doubtless the maintenance of this price had a certain psychological importance, but this should not have been allowed to outweigh the practical importance of avoiding any carry-over of old crop sugar. Cuba was not in a position to dictate prices by any rigid principle, and the Agency's slowness to avail itself of every opportunity to pass on supplies, must be put down either to the failure of the members of the Sales Committee to realise the limitations of the scheme, or simply to their inexperience in the art of marketing. In order to try and dispose of the surplus stocks, grinding was postponed by Presidential Decree until January 15, an action which was all the more necessary that season since bad weather had delayed the ripening of the cane. With the New Year, prices continued to decline even when the Agency kept out of the market altogether, and as the new crop sugars became available the Agency took the bold step of offering sugar to American refiners at 2 cents c. and f. with a guarantee that during the period of shipment these terms of sale would remain unaltered. This failed, however, to stimulate any large volume of buying, and at the end of February the Agency repeated its offer with a guarantee against any reduction before March 28. The New York market treated this as a sure sign of defeat, and buying was still so slight as to be complete standstill so far as the Agency was concerned. Relatively small sales were also made to Europe, but at the beginning of March there were 813,000 tons of sugar in Cuban ports and 850,000 tons at the mills, practically all of which was unsold, while every day the mills were adding their peak production of the season. The position of the Cuban-owned mills was becoming desperate. The American mills had not only a stronger financial position in general, but they could borrow from the American banks. The smaller Cuban mills had the greatest difficulty in doing so, and it is significant that the revolt against the scheme was headed by the producers in Santa Clara province, where the Cuban-owned mills are mostly located. By the end of February the termination of the Agency was being loudly demanded by several leading Cuban newspapers. Eventually internal dissension boiled over, and a general meeting of the mills was called for April 3. Statistics, published by the Agency, showed that up to March 22, 1930, the Agency had sold a total of 973,919 tons, of which 395,405 tons were old-crop sugar, at an average price equivalent to about 1*9 cents c. and f. New York, and 578,514 tons were new-crop sugar at an average equivalent to about 2*75 cents. The actual shipments of new-crop sugar were only about 10 per cent. of the total estimated output to that date. Contrary to expectations, however, the voting went in favour of the retention of the Agency; 12,918 votes in favour and 11,139 against. The Cuban-owned mills voted solidly against the Agency, but a large majority of the American mills voted in favour, even though at the start they had viewed the scheme with very little favour. This complete change of attitude on the part of the two parties is, however, readily understandable. To the Cuban-owned mills the retention of the scheme meant death from cash-starvation, and that right soon the American mills were able to carry on, and they saw that if they did carry on, the majority of the Cuban mills would be bankrupt within a few weeks.
The termination of the Export Agency was the signal for a fresh decline in prices: the average New York c. and f. price for February and March had been a little over 1½ cents, and now dropped for April to a little under 1½ cents. The uncertainty produced by the long-drawn-out battle over the U.S. tariff was blamed for the further declines in May, which averaged only 1 cent. These prices broke all previous records: even in 1902, just before the Brussels Convention, the minimum quotation was 1½ cents. In the light of subsequent events, however, little blame can be thrown on the U.S. tariff negotiations. As has been said above, during the winter and early spring the general opinion had been that there would be no change in the sugar tariff. But the collapse of the Cuban Export Agency and the apparently endless decline of prices, strengthened the hands of the U.S. domestic producers, and, eventually, on June 18, the full duty was raised from 2½ cents to 3½ cents, on the basis of 96 degrees polarisation. Cuban sugar was, of course, still to receive a preference of 20 per cent., and therefore the actual differential was increased from 0½ cents to 1½ cents. The benefit of this increased differential, however, is purely potential, for it is impossible for Cuba to obtain it, whatever marketing organisation she might adopt, so long as the U.S. tariff remains unchanged. The only conclusion is that the Agency did not succeed in accomplishing even what it might have done, simply on account of the folly or stupidity of those in charge. But in more general terms, the failure of the scheme was due to weakness of personnel, on which subject comment has already been made.

XI.—THE PRESENT POSITION AND PROSPECTS.

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It is clear that the price-level at the moment bears no relation to the cost of production, nor indeed to consumption. The decline during this summer represents in the main the un-willingness or inability, or both, of merchants and speculators to carry stocks on the scale which is really required. At the end of each month it has seemed impossible for prices to decline further, but each month the impossible has happened, and the holders of stocks have lost heavily, while the margin between the spot price and prices for future delivery has become abnormally large. Merchants and speculators have virtually declined to hold stocks, and this function has been thrown back upon the shoulders of producers. Thus the stocks in the U.S. ports are only some two or three hundred thousand tons above what may be termed a normal level, and moreover it is almost certainly negligible. On the other hand, Cuba holds nearly three-quarters of her crop unsold. It is, in fact, most surprising that the mills, especially the Cuban mills, are managing to carry so much of the crop in view of their weak financial position. Presumably they have managed to pledge sugar with the banks for just sufficient to provide their current cash requirements during the grinding season, while all expenditure on cultivation is being reduced to an even lower minimum than in recent years. How long Cuba can refrain from flooding the market depends on the extent of the carry-over which the banks will allow. Clearly Cuba has got to sell at least 2 million tons before next year begins, and the question is whether refiners will become interested to that extent, or whether pressure to sell on the part of Cuba will cause a further drastic break in prices.

Since refiners are living from hand to mouth, much depends on the rate of consumption. In the U.S., consumption during the first six months of this year is estimated as showing a decline of nearly 750,000 tons as compared with the first half of 1929. The statistical consumption of Europe up to the end of May also shows an appreciable decline, for which Germany and Great Britain are mainly responsible. The effects of world depression on purchasing power have certainly not yet been fully developed, and it will be surprising if world consumption reaches within 1 million tons of the 1929 figure. It must be remembered that the producer receives the cheapest sugar ever known. For production and consumption are not so far out of equilibrium. If world consumption in 1929-30 had been equal to the previous season, there would have been no maladjustment at all, and the only trouble would have been the 2-8 million tons of stocks over and above the 1 million tons which may be considered the level of convenience. It is the decline in consumption, and the consequent prospect of a further reduction in prices, which has made matters so infinitely worse. It is, of course, too early to speak of the 1930-31 crop, but it is to be feared that any effect of low prices in further reducing crops in Cuba, and other countries producing for the world market, will be at least offset by the effect of higher tariffs in stimulating further production elsewhere. Even with a stationary production, however, any resumption of the normal trend of consumption, together with the rebuilding of invisible stocks, would quickly dispose of 2 million tons surplus stocks. The present crisis is fundamentally a crisis of stock-holding, and not a crisis due to seriously excessive productive capacity, for any further reduction in capacity which is required in
Cuba to meet the increased duty-free capacity likely to result from the U.S. tariff, may safely be left to the care of a price-level of 1½ cents. The time seems, in fact, to be approaching when some further experiment in artificial control might produce most beneficial results. Rumours have already begun to spread concerning the formation of stock-holding pools by financial interests. If a pool could be formed to buy up, say, 1 million tons, and thus satisfy the most urgent cash needs of the Cuban mills, the market might feel it had got sufficient assurance against a further price fall, and refiners and middlemen would then take care of the remaining supplies. The danger to-day is that without some such assurance and encouragement, the demand will continue sluggish, and Cuban sellers, forced to press their supplies on the market, will send the price in a further headlong fall. It may seem incredible that the price can go any lower, but since it now really depends simply on ability to hold stocks, and has little relation to conditions of current production and consumption, there is almost no limit to the potential fall. Doubtless the turn will come before long, but it may be just too long, and if so, the whole national economic life of Cuba will probably be shaken into ruin.

Cuba’s position is indeed most critical. Economically Cuba ought to have been brought within the tariff wall of the U.S., which would then have obtained virtually its whole supply of sugar from the island, and which had become an even greater agricultural produce of a semi-tropical character, at much cheaper cost to the American consumer. As things have been, the U.S. has built up during the last twenty years not only a large beet sugar industry, but a still larger cane sugar industry in Hawaii, Porto Rico, and Louisiana. If Cuban sugar entered the U.S. without duty, these industries would rapidly cease to exist, but the more efficient the Cuban sugar industry becomes, the higher will the U.S. tariff be raised. Even if public opinion in the U.S. becomes more hostile to tariff protection in general, the sugar tariff must be maintained at least at a level which will prevent all the suggested industries on something approximating their present scale, even though further expansion may be stopped. In Cuba, a large body of opinion inclines to the belief that the U.S. tariff is being employed as an economic weapon to force Cuba to acquiesce in annexation by the United States. The truth is that the United States would be vastly embarrassed by any such development, at least until its sugar requirements have grown sufficiently to take all that Cuba can produce as well as the present, duty-free supplies; and since Cuba can certainly produce enormously more sugar than at present, that time is far distant. But whatever the attitude of the U.S., Cuban nationalism is probably strong enough to defeat any proposal for annexation, however desperate the economic position.

As regards the U.S. market, Cuba will continue to supply the balance of its requirements, and since in all probability American opinion is turning against extreme protectionism, there will be little further expansion in duty-free supplies, and accordingly that balance will steadily grow.

As regards the rest of the world, it seems doubtful whether Europe can materially increase her beet production. In the Far East, Japan, including Formosa, will probably maintain its newly-won independence of Java supplies, and for a time it is clear that Java will have difficulties in disposing of her recently increased production. But a further increase in the Java crop can only come from more intensive cultivation, since there is little more land available so long as the Dutch Government pursues its present policy. If the Philippines gain their independence and their sugar is subject to the U.S. tariff, additional supplies for the Far East will become available from that source, but there will probably be no great expansion for a long time. Other appreciable sources of supply mostly depend on expansion on the maintenance or increase of protection, and there must surely be a limit. Thus the day may come when Cuba triumphs over the wave of economic nationalism, which has so nearly engulfed her, may not be far distant, for the world’s consumption is far from saturation point, quite apart from the results of population growth. Cuba’s trouble in the long run is not that the world is ceasing to require her sugar; her real trouble is whether the business of producing this sugar is to pass entirely into the hands of the American capitalist, leaving to the Cuban people merely the role of the dogs under the rich man’s table.

The Cuban sugar industry repays study not only in respect of its recent experiments in economics, but in respect of many other broader and most interesting problems which are embraced by that now somewhat old-fashioned title, political economy.
XII.—THE EFFECTS OF DEPRESSION ON THE AGRICULTURAL INDUSTRY AND THE AGRICULTURAL POLICY OF THE CUBAN GOVERNMENT.

Such a title really merits an exhaustive treatment by some person properly equipped for the purpose with a technical knowledge of cane farming, and an intimate acquaintance with every turn of the country districts of Cuba. The present writer has no such qualifications, and offers here only a brief sketch of those features of the story which have a more direct bearing on the economic and commercial problems with which the above study has been concerned.

In the first place, the reader may well ask himself how it is that there has not already been a wholesale abandonment of mills and plantations if the average cost of production, including a return of 5-7 per cent., has been said in Section V above, cannot be covered under a New York c. and f. price of much less than 3 cents. For the five years 1925-29 the average price has been roughly 21/2 cents, and in three of those years there was a substantial restriction of output, involving greatly increased costs per unit of product. In 1929 the average price just reached 2 cents, while for the first six months of 1930 it has been approximately 17 cents.* Granted that all profits were sacrificed, it still appears somewhat mysterious that the industry should have been able to carry on without a substantial reduction of capacity. In all, there has probably been a quite appreciable acreage abandoned, but it has mostly been in the form of odd fields here and there, fields which were left uncut during restriction and where the cane had become too dried up: fields which had become so choked with weeds that the undergrowth had to be burnt before the cane could be cut, with the result that weed growth was so stimulated in the following season that the new cane shoots became choked, the cost of such weeding being prohibitive: and new fields which were planted in 1922 and 1923 and have failed to fulfill the expectations owing to the unsuitability of the soil. But there have not been cases where mills were unable to grind through lack of sufficient cane supplies, and the decline in the 1930 crop has been due far more to unfavourable weather conditions than to reduction of acreage. In the main the growers of cane have so far been able to carry on, as have also the mills themselves.

Briefly the explanation is as follows. Since the mills pay 7 or 8 per cent. for most of their cane in proportion to the average price which they obtain for the sugar, the cane farmers (colonos) have received less than an "economic" price for their cane. In addition, since the centrals, particularly the Cuban-owned centrals, have not been able to borrow to the usual extent, they have cut down the scale of their customary advances to their colonos during the growing season. The colonos have been hit in both these ways, and the need to reduce his wage bill, owing to shortage of cash, has prevented any recourse to more intensive methods of cultivation as a means of salvation. He has therefore had to take the other alternative, and cultivate more extensively by reducing his expenditure on weeding, etc., and more cheaply by reducing rates of wages for such labour as he does employ. Everywhere weeding has been cut down to a minimum, and except in a few districts where the resident labour has some alternative employment, wage rates have been cut by half or even more. This cutting of wage rates is sedulously denied, for any admission would be used by the U.S. domestic producers as a weapon in their campaign for a high tariff protection, but there is no doubt whatever that the customary wage rates now exist only on paper. In 1929 field-workers were lucky if they got 40 cents a day instead of one dollar, and many mills were not paying more than 20 cents. Moreover, the result of reduced weeding is that the work of cutting the cane is far more arduous, and any increase of odd fields has the effect of increasing expenditure of time and energy. Thus the day wage of economic necessity engulfs her world's consumption, quite apart from growth Cuba's difficulties are, of course, even more real trouble is that the world is engaged in cutting this sugar is one of the American people's table, the world's most important study not only in economics, for even at starvation wages many have not been able to obtain reasonably continuous employment.

Conditions on the country districts were terrible towards the end of the growing season of the present crop (i.e., in the autumn of 1929): what they will be like this autumn beggars imagination.

The consequences in the immediate future are, of course, the main interest from the commercial point of view. Is the present reduction of costs entirely at the expense of efficient production, including in that term the customary standard of living of the Cuban agricultural worker, and therefore only temporary, or is it that the present distress is likely to stimulate greater efficiency in the long run? The answer is still extremely problematical, but there can be...
no doubt that radical changes in the organisation of the industry have already become noticeable: the doubtful issue is whether these developments will lead to any considerably greater efficiency. These changes centre round the colonos themselves. As has been explained in Section IV, the American mills favoured the large-scale colonos, and especially in the days before the war his was both a pleasant and a profitable existence. Some few of them were extremely skilful specialists in cane farming, and were most usefully employed on the older lands of the western half of the island, where the fertility of the soil and the prevalence of disease gave real scope to specialist knowledge. But many of them were incapable as farmers, and particularly on the new fertile lands of the east, the large colonos was a mere parasite on the industry. These large colonos have been rapidly disappearing in recent years: the Americans now know enough about the agricultural side of the industry to recognise inefficient supervision when they meet it, and if the incapable colonos has not decamped with as much as he can borrow (which occurrence has been so frequent that the bad debts on this account in the books of some mills are conspicuous), the central has refused to renew his tenure of their land, or in some way ousted him. But the American mills have always desired to control the production of their cane supplies, and though better experience has convinced them that administration cane can rarely be produced as cheaply as it can be bought, that has not reconciled them entirely to the colonos system with its tiresome accomplishments of perpetual loans which may not be recoverable for years, and only if still more money is loaned to the debtor. The result of six years of depression has been that even the capable colonos are almost hopelessly indebted to the mills, and therefore it is becoming more and more common to reduce these colonos to the position of sub-managers, paid a small salary but in excess of that on the results they produce. The central thus obtains a greater measure of control, and knows how its money is spent, even if it is adding to its risks.

Such manager-colonos must account for every penny, and the central's agricultural specialists must approve of all capital improvement or development schemes. The central finds all the machinery and transport, and arranges its colonos so as to take advantage of every development of technical progress. Ten years ago the line of development might have been a slow extension of ordinary administrative cane. But the great importance of small overhead costs on the agricultural side and the lowest possible prime costs have been vividly demonstrated during the last few years. The system of administration cane as ordinarily understood, involves a heavy fixed charge for supervision by salaried American employees, and lacks the elasticity which is obtained when all but a small part of this charge depends upon results. This is one great advantage of the new system of colonos managers, and it seems probable both that it will now extend widely, and that it would not have done so but for these years of depression. Whether in the long run it will be as cheap as the old large colonos system remains to be seen, but at least it seems highly probable. Now that mill efficiency has been so highly developed, the American managers are free to give more attention to the agricultural side of the industry, and under the new system of sub-manager colonos experiments can be freely made, and improvements and discoveries can be instantly applied throughout the central's cane area, without encountering resistance from conservative individuals, as would have happened with the old system. The new system appears to possess all, or nearly all, the advantages of the old, but without its main drawbacks.

The old large colonos system has therefore been shaken to its foundations. But at the same time these years of depression have seen a remarkable growth in the number of smallholders who grow a few acres of cane as an adjunct to a simple kind of subsistence farming. These men cannot truly be termed peasant proprietors, for they hardly own their land, which in most cases is leased from the centrals or some large landowner, but they have considerable security of tenure in practice. These smallholders are entirely family affairs: each has a little thatched cottage, a relatively large garden, cows, pigs, chickens, perhaps some orange trees, and always a grove of banana trees to provide their staff of life. In addition they grow 60-120 acres of cane, on which they operate by day, but in the evenings, on the 2 cent sugar, and prepared to go on producing cane at that price-level until it rises, when they expect to make their fortunes. For practical purposes their costs of production may be said to be nothing, for they could probably eke out an existence of a sort without their cane, while they cannot lose on it whatever the price, since almost the whole cost of production is their own labour. Their standard of living is not high, and though they cannot obtain a real profit from large-scale mechanised ploughing to be done by four or five smallholders working together, yet they can still make a living by the careful attention and vigilance, which they give to their own lands. The result is that the large colonos have found it almost impossible to compete with the small-holdings in the belief of the Cuban Government which these years of depression has brought about the introduction of mechanical methods of cane cultivation, in certain areas where there are few other industries to require additional labour. Colonos are welcomed as colonos, small-holdings in the belief of the Government. The small-holder can save the labour of the day and night, so that the large colonos have been almost entirely eliminated from the cane industry.
In the years of depression, employees of the sugar cane factories have been laid off, and this has had an adverse effect on the economy of the rural areas. However, there have been some positive developments. The system of small-holdings, which allows peasants to grow their own cane, has been expanded. This is partly due to the difficulties faced by the larger cane factories, which have been unable to provide employment for all their workers. The Cuban government has encouraged this movement, as it offers a way to absorb surplus labour and provide employment for the unemployed in both rural and urban areas.

The small-holdings system has some advantages and disadvantages. On the one hand, it allows peasants to grow their own cane and sell it at a fair price. On the other hand, it requires more manual labour and is less efficient than large-scale production. However, the small-holdings system has the potential to be very efficient once the necessary inventions are made. The cutting of the cane is a particularly challenging task, as the canes are long and tangled. Invention is needed to improve the efficiency of this process.

The Cuban government has welcomed the growth of small-holdings, as they believe they can compete with large-scale production. The agricultural policy of the Cuban government is based on the desire to extend this small-holdings movement until the agricultural sector is fully under Cuban control. The government hopes that the small-holdings system will be able to compete with the large-scale production of the American type, and that the move towards this system will be beneficial for the Cuban people.

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APPENDIX.—STATISTICAL TABLES.

Note.—The following tables present only such statistics as are specially relevant to the present study. The figures are mostly taken from Czarnikow's weekly reports and Farr's Manual of Sugar Companies, and the original source is usually Willett and Gray, or F. O. Licht.

### TABLE I

WORLD'S SUGAR PRODUCTION.

<table>
<thead>
<tr>
<th>Crop Year</th>
<th>Total World (Million tons)</th>
<th>Cuban Crop (Million tons)</th>
<th>European Beet Crop (Million tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1914-15</td>
<td>18.5</td>
<td>3.6</td>
<td>7.4*</td>
</tr>
<tr>
<td>1915-16</td>
<td>16.9</td>
<td>3.9</td>
<td>5.9</td>
</tr>
<tr>
<td>1916-17</td>
<td>17.4</td>
<td>3.4</td>
<td>5.1</td>
</tr>
<tr>
<td>1917-18</td>
<td>15.4</td>
<td>3.2</td>
<td>3.4</td>
</tr>
<tr>
<td>1918-19</td>
<td>17.8</td>
<td>3.7</td>
<td>7.7</td>
</tr>
<tr>
<td>1919-20</td>
<td>16.6</td>
<td>4.0</td>
<td>4.7</td>
</tr>
<tr>
<td>1920-21</td>
<td>17.6</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>1921-22</td>
<td>18.4</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>1922-23</td>
<td>19.1</td>
<td>4.1</td>
<td>5.1</td>
</tr>
<tr>
<td>1923-24</td>
<td>23.7</td>
<td>5.1</td>
<td>5.4</td>
</tr>
<tr>
<td>1924-25</td>
<td>28.6</td>
<td>4.9</td>
<td>6.9</td>
</tr>
<tr>
<td>1925-26</td>
<td>27.4</td>
<td>4.0</td>
<td>8.0</td>
</tr>
<tr>
<td>1926-27</td>
<td>22.1</td>
<td>4.4</td>
<td>8.4</td>
</tr>
</tbody>
</table>

* In 1913-14 the European beet crop amounted to nearly 8 million tons, and had been 8.3 million tons in 1912-13, the record year.

### TABLE II

SUGAR PRODUCTION UNDER THE PROTECTION OF THE U.S. TARIFF.

<table>
<thead>
<tr>
<th>Crop Year</th>
<th>Beet Sugar (Thousand tons)</th>
<th>Cane Sugar* (Thousand tons)</th>
<th>Total (Thousand tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1919-20</td>
<td>653</td>
<td>108</td>
<td>761</td>
</tr>
<tr>
<td>1920-21</td>
<td>909</td>
<td>151</td>
<td>1,060</td>
</tr>
<tr>
<td>1921-22</td>
<td>951</td>
<td>200</td>
<td>1,151</td>
</tr>
<tr>
<td>1922-23</td>
<td>450</td>
<td>249</td>
<td>699</td>
</tr>
<tr>
<td>1923-24</td>
<td>110</td>
<td>244</td>
<td>354</td>
</tr>
<tr>
<td>1924-25</td>
<td>147</td>
<td>208</td>
<td>355</td>
</tr>
<tr>
<td>1925-26</td>
<td>848</td>
<td>124</td>
<td>972</td>
</tr>
<tr>
<td>1926-27</td>
<td>100</td>
<td>151</td>
<td>251</td>
</tr>
<tr>
<td>1927-28</td>
<td>130</td>
<td>130</td>
<td>260</td>
</tr>
<tr>
<td>1928-29</td>
<td>118</td>
<td>183</td>
<td>301</td>
</tr>
<tr>
<td>1929-30</td>
<td>131</td>
<td>165</td>
<td>296</td>
</tr>
</tbody>
</table>

* In 1913-14 the European beet crop amounted to nearly 8 million tons, and had been 8.3 million tons in 1912-13, the record year.

### TABLE III


<table>
<thead>
<tr>
<th>Crop Year</th>
<th>Million tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1919-20</td>
<td>60</td>
</tr>
<tr>
<td>1920-21</td>
<td>5-2</td>
</tr>
<tr>
<td>1921-22</td>
<td>5-6</td>
</tr>
<tr>
<td>1922-23</td>
<td>6-5</td>
</tr>
<tr>
<td>1923-24</td>
<td>6-8</td>
</tr>
<tr>
<td>1924-25</td>
<td>6-6</td>
</tr>
<tr>
<td>1925-26</td>
<td>7-4</td>
</tr>
<tr>
<td>1926-27</td>
<td>7-5</td>
</tr>
<tr>
<td>1927-28</td>
<td>7-9</td>
</tr>
<tr>
<td>1928-29</td>
<td>7-6</td>
</tr>
<tr>
<td>1929-30</td>
<td>7-4</td>
</tr>
</tbody>
</table>

### TABLE IV

WORLD PRODUCTION, CONSUMPTION AND CARRY-OVER.

<table>
<thead>
<tr>
<th>Crop Year</th>
<th>Million tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1919-20</td>
<td>36</td>
</tr>
<tr>
<td>1920-21</td>
<td>28</td>
</tr>
<tr>
<td>1921-22</td>
<td>24</td>
</tr>
<tr>
<td>1922-23</td>
<td>20</td>
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<tr>
<td>1923-24</td>
<td>16</td>
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<td>1924-25</td>
<td>16</td>
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<tr>
<td>1925-26</td>
<td>13</td>
</tr>
<tr>
<td>1926-27</td>
<td>13</td>
</tr>
<tr>
<td>1927-28</td>
<td>10</td>
</tr>
<tr>
<td>1928-29</td>
<td>12</td>
</tr>
<tr>
<td>1929-30</td>
<td>10</td>
</tr>
</tbody>
</table>

* Provisional.
### TABLE V: DISTRIBUTION OF VISIBLE SUPPLIES.

Note: From January 1, 1925, the European figure includes Poland. From July 1920 the Cuban figure includes stocks in the interior and not merely at the ports. These changes affect the comparability of the series, though interior stocks in Cuba were probably negligible except for the few months preceding their inclusion.

#### TABLE VI: UNITED STATES SUGAR CONSUMPTION, TOTAL AND PER CAPITA.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (000 tons)</th>
<th>Per Capita (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1914</td>
<td>3,764</td>
<td>84-20</td>
</tr>
<tr>
<td>1915</td>
<td>3,693</td>
<td>83-93</td>
</tr>
<tr>
<td>1916</td>
<td>3,699</td>
<td>83-38</td>
</tr>
<tr>
<td>1917</td>
<td>3,848</td>
<td>85-58</td>
</tr>
<tr>
<td>1918</td>
<td>3,749</td>
<td>85-36</td>
</tr>
<tr>
<td>1919</td>
<td>4,205</td>
<td>86-46</td>
</tr>
<tr>
<td>1920</td>
<td>4,267</td>
<td>86-47</td>
</tr>
<tr>
<td>1921</td>
<td>5,033</td>
<td>103-18</td>
</tr>
<tr>
<td>1922</td>
<td>4,971</td>
<td>98-63</td>
</tr>
<tr>
<td>1923</td>
<td>4,854</td>
<td>96-40</td>
</tr>
<tr>
<td>1924</td>
<td>5,569</td>
<td>105-10</td>
</tr>
<tr>
<td>1925</td>
<td>5,520</td>
<td>104-31</td>
</tr>
<tr>
<td>1926</td>
<td>5,593</td>
<td>105-06</td>
</tr>
<tr>
<td>1927</td>
<td>5,541</td>
<td>104-27</td>
</tr>
<tr>
<td>1928</td>
<td>5,511</td>
<td>103-15</td>
</tr>
</tbody>
</table>

* Statistical Consumption (Refined Value), not of course physical consumption, of which no records are available.

### TABLE VII: PROPORTION OF CUBAN CROPS EXPORTED TO UNITED STATES.

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1909-13</td>
<td>94</td>
</tr>
<tr>
<td>1921</td>
<td>56</td>
</tr>
<tr>
<td>1922</td>
<td>86</td>
</tr>
<tr>
<td>1923</td>
<td>55</td>
</tr>
<tr>
<td>1924</td>
<td>72</td>
</tr>
<tr>
<td>1925</td>
<td>67</td>
</tr>
<tr>
<td>1926</td>
<td>78</td>
</tr>
<tr>
<td>1927</td>
<td>72</td>
</tr>
<tr>
<td>1928</td>
<td>72</td>
</tr>
<tr>
<td>1929</td>
<td>76</td>
</tr>
</tbody>
</table>

### TABLE VIII: AVERAGE MONTHLY AND ANNUAL PRICE OF RAW SUGAR F.O.B. NEW YORK IN CENTS PER LB.

<table>
<thead>
<tr>
<th>Month</th>
<th>1910</th>
<th>1911</th>
<th>1912</th>
<th>1913</th>
<th>1914</th>
<th>1915</th>
<th>1916</th>
<th>1917</th>
<th>1918</th>
<th>1919</th>
<th>1920</th>
<th>1921</th>
<th>1922</th>
<th>1923</th>
<th>1924</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
</tr>
</thead>
</table>

* Provisional.
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country, or no part of that
country, or no part of that
country, or no part of that
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country, or no part of that
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country, or no part of that

country, or no part of that

United Java Sugar Producers
commonly known as the V.J.P.
letter it will be referred to be
a generalisation is true to
there is no doubt that the
most important part in the rec
industry, or the Co-

I.—THE ESTABL

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not be imagined
true in other cases,
years of patient organisation
and, on the contrary, it may
whether it would yet be in ex-
change relations of the Em-

East. In 1914 the supply
resulted in a considerable accu-
Java, and the mills were
obtain their current require
Competitive selling by the re-
over prices, though the wa-

que and the New York pr
PART II.

THE MARKETING OF JAVA SUGAR IN RECENT YEARS

INTRODUCTION.

The Java sugar industry has often been held up to other industries in other countries as a model of corporate organisation, and no part of that organisation has received so much laurelisation, or so many envious glances, as that which deals with the marketing of the sugar. The fact that Java has until recently been able to view with comparative equanimity prices which were driving most sugar producers to appeal frantically to their Governments for increased protection or higher bounties, or, as in the case of Cuba, to try restrictionist expedients, has often been credited to the efficient and orderly marketing of the "Vereenigde Java Suiker Producenten," or "United Java Sugar Producers Association," commonly known as the V.J.P., by which initial letters it will be referred to below. How far such a generalisation is true is another matter, but there is no doubt that the V.J.P. has played a most important part in the recent history of the industry, or that the Co-operative Export Agency established by Cuba in 1929–30 was in no small degree inspired by and to some extent modelled upon it. Though Cuba's attempt was completely unsuccessful, it is quite possible that the project will be revived, while other raw material industries have been and probably will continue dallying with the general idea. The Dutch rubber producers, for example, have long felt that they should try to follow in the footsteps of their sugar brethren, as public opinion in Holland and Java is constantly telling them to do. A brief study of the organisation of the V.J.P., and of its actual operations in recent years, may therefore form a useful appendix to a study of the recent experiments in conscious control which Cuba has been making with sugar, and other countries with other commodities.

THE ESTABLISHMENT AND CONSTITUTION OF THE V.J.P.

The V.J.P. started its career in a most informal and almost fortuitous way. It was not, as might well be imagined and as has often been true in other cases, the culmination of years of patient organisation directed to that end: on the contrary, it may well be doubted whether it would yet be in existence but for the chance reactions of the European War in the Far East. In 1917 the shipping shortage had resulted in a considerable accumulation of stocks in Java, and the mills were hard put to it to obtain their current requirements of cash. Competitive selling by the mills was driving down prices, though the world was short of sugar and the New York price rising by leaps and bounds. An informal committee of bankers undertook therefore to regulate the sale of a large proportion of the crop, and to finance any balance which could not be disposed of without depressing prices to an unreasonable extent. In 1918, as conditions were equally difficult, it seemed desirable to continue the same sort of arrangement, and the V.J.P. was formally constituted. The membership was open to all sugar companies with headquarters in Holland and mills in Java. The membership contract was for the single year 1918, and it has continued to be only an annual contract down to the present day. The V.J.P. started with a membership of rather more than 80 per cent.
of the industry, and this was quickly increased to 90 per cent. An annual meeting is held in Holland at which the members elect a Committee of Management, consisting of about 36 representatives, voting being by acreage under sugar cultivation. The Committee of Management delegates the actual business of selling to a sub-committee of three, and only broad questions of selling policy are ever brought before the full committee. It is this Triumvirate which constitutes the V.J.P.] for practical purposes. The Triumvirate appoint the Java managers of their respective firms to be the representatives of the V.J.P. in Java, and they carry out the actual work of selling according to detailed, and not merely general, instructions from Holland. They also manage the internal affairs of the association, e.g. the allotment of contracts and the equalisation of proceeds (to which matters further attention will shortly be given), and for this they can refer to a local "Committee of Assistance" composed of the representatives of the sugar companies in Java. This Committee of Assistance is therefore in a way a counterpart of the Committee of Management in Holland, but, unlike the latter, it has not even a theoretical claim to any voice in the determination of prices or selling policy.

At first sight it is one of the most extraordinary features of the organisation that the heads of the same three firms have always composed the ruling Triumvirate. The explanation lies in the degree of combination which has been reached within the industry under the leadership of the big banking-trading concerns. These have gradually absorbed or obtained control of one mill after another. In the main this has come about through the execution of mortgages: in periods of depression the mills borrow from the banks on mortgage, and if the loan cannot be paid back at the appointed time, the banks execute the mortgage and take over the mill. The process of concentration has therefore been in the main involuntary on the part of the original owners: it first appeared on a significant scale in the crisis of 1883, and has been a common feature of every period of serious depression ever since. The absorption of mills by the banks is indeed a very good index of the real severity of any depression. In addition, however, the banks have made direct investments in sugar mills on their own initiative, but this is a much less important cause of the concentration. As well as the banks, some of the larger merchant firms have come to control a number of concerns, which, having borrowed, found themselves unable to repay. The result is that in recent years seven concerns, with over 100 mills between them, have come to control no less than 75 per cent. of the industry, and the remaining 25 per cent. is by no means composed of single-mill proprietors. But these seven concerns are of very unequal size. The Triumvirate is composed of the three biggest, namely—

1. The Nederlandsche Handel Maatschappij, which controls 25 mills, of which it owns at least 7 outright.
2. The N.V. Handelsvereeniging "Amsterdam," which also controls 25 mills, of which it owns at least 14 outright.
3. The N.V. Ned.-Indische Landschappie Maaatschappij, which controls 23 mills, of which it owns at least 8 outright.

These three concerns therefore control 73 out of the total of 175 mills in 1928, and since on the average their mills are larger than the average of the remainder, they may probably be said to control very nearly, if not quite, 90 per cent. of the output of Java sugar. Since approximately 90 per cent. of the total crop is produced by mills which are not members of the V.J.P., it is clear that the Triumvirate maintains itself unchanged simply because it controls well over half the voting power of the Association, and as long as the three agree to keep each other in office, nothing can disturb their tenure. It is this exceedingly solid backbone which is really the making of the organisation. At the same time, it must not be forgotten that any member can withdraw as soon as his current crop is sold, and that the control of the Triumvirate within the Association would avail them little if its membership substantially declined: even 90 per cent. is not too high a proportion to give adequate control of the market. Moreover, if it offends some of the existing members, the Triumvirate has small hopes of recruiting any substantial proportion of the present non-associated output. The most important non-associated firms are the Oei Tiong Ham Suikerfabrieken, owning five mills, and the three mills of the Lie Djeng Han. The former of these Chinese firms is really part of a big Chinese merchant firm, and therefore naturally preserves its freedom, while the latter is a real family concern determined to remain completely independent. Of the remaining eight non-associated mills, some might be recruited, but they have not shown much willingness so far, but several are really under the control of English and Dutch merchant firms, and are consequently most unlikely to join. The position therefore is that the V.J.P. is never likely to increase its control much beyond 90 per cent., unless some of the members get the chance of buying up the outside mills.
The headquarters of the V.J.P. are, as has been said, in Holland, and the managers of the Triumvirate in Java work to orders as regards the price at which they may make sales. Exporters and merchants make bids to the V.J.P. office in Sourabaya, and these bids are usually neither accepted nor rejected until the following day. This gives the Java office time to refer to Holland. Probably the Java office is empowered by Holland to make sales up to a certain quantity within certain limits of price, or at a particular price, and reference to Holland is thereby obviated for many transactions, but it seems that the margin for initiative by the Java office is normally quite small. Reference is often made in market reports to the Trust's "limit," but this merely means that when a transaction has been made, the Trust is assumed to be willing to make further sales at that price until it refuses to do so or another transaction has been made at a different price: hence if brokers' bids at a lower price are refused, the Trust is often said to be "maintaining its limit," or some similar phrase is used. But no one knows what orders the Java committee receives from Holland, and the fact that a certain price has been accepted to-day does not necessarily mean that it will be accepted to-morrow. On very few occasions only has the Trust taken the initiative and announced a definite price. In practice when an exporter suspects that fresh instructions have been sent from Holland, he arranges with some small Chinese firm to bid for 300 tons, which is the Trust's minimum transaction, or a little more, and a succession of such bids soon reveals what change, if any, has been made. The problem is solved through the Chinese because the large exporters are usually unwilling to let the Trust know that it is "in the market," and since the large exporters have their own special brokers, if he made a bid, the Trust would be fairly certain as to his principal. No big exporter would bother to buy as little as 300 tons, except for the purpose of finding out the Trust's price, preparatory to putting in a large order, and the Trust, with the game revealed, might alter its price again, whereas if a small Chinese firm makes such a bid, the Trust may suspect, but it cannot be sure, that the bidder does not genuinely require sugar. Since the Trust stipulates for twenty-four hours' grace to accept or reject bids, it follows that bids made on the same day at the same price are either all accepted or all rejected: any discrimination would clearly make things impossible from the buyers' point of view. But for the following day the Trust may alter its limit if it wishes: hence buying comes usually in spurts. For weeks the Trust may have been refusing bids, and then orders come from Holland to lower the limit, and bids at a certain price are accepted: buyers who after these weeks of market inactivity may have become keen to satisfy some of their requirements at this lower price, rush in to make their bids before the Trust raises its limit again. Conversely, if the Trust has been seeking better prices, and eventually accepts a bid at a higher price than its last transaction, buyers may decide to rush in before the Trust shall raise its limit still higher. Thus for weeks there may be insignificant dealings of a few hundred tons, mostly to test the Trust's limit, and then on one day business involving several hundred thousand tons may be transacted, after which the market will again quickly lapse into its former dormant condition. A variable volume of trading is, of course, a feature of all organised markets, but it is specially marked in this Java sugar market. As regards the non-associated firms, their constant endeavour is to steal a march on the Trust: the Trust undoubtedly sets the general level of prices on the supply side, but with so many consuming markets differing so widely as India, China and Japan, to mention only the chief, there is, of course, ample scope for a difference of ideas between the Trust and the big exporters, and when this lasts for a considerable time, there is plenty of scope for altered marketing by the non-associated firms. A variable volume of marketing is therefore a feature of the Trust's supply, and the Trust is not necessarily the main trader. Apart from the Trust, there is no central authority in this industry, and the means composed of these seven firms, the Triumvirate in Java, the V.J.P. in Holland and some Chinese firms, just as there is for dealers in the "second-hand" market. The last named is so called because its main business is the transference of sugar, and the fact that a sugar licence is required is simply to enable dealings to be transacted more easily. As there is a variable volume of buying in each market, the prices do not fluctuate, and the large exporters have their own special brokers, if he made a bid, the Trust would be fairly certain as to his principal. 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The last named is so called because its main business is the transference of sugar, and the fact that a sugar licence is required is simply to enable dealings to be transacted more easily.
This normally means that the sugar is shipped from the mill to the buyer’s warehouse at the port at which the V.J.P. has announced that delivery will be given. The buyer cannot stipulate the port at which delivery is to be made, and he may get delivery of a large order partly at one port and partly at others; he has simply to rely on the V.J.P. to give him a fair proportion of his total orders at the most convenient ports. Neither can the buyer stipulate the mill from which his sugar shall come unless he pays a premium of 25 cents per 100 kilos, which is virtually prohibitive; again he has to rely on the V.J.P. to give him a fair proportion from the mills producing the best product. In practice, buyers often indicate informally the port at which, and less frequently the mills from which, they would prefer delivery to be made, and, especially in the case of the larger buyers, the V.J.P. will naturally try to satisfy their desires. There seems, in fact, to be little or no dissatisfaction amongst the larger regular customers of the V.J.P. at the handling of what might seem to be somewhat difficult and touchy questions, though doubtless the occasional purchaser of relatively small amounts often fages impotently at what he considers very unfair treatment. But on this matter of delivery, some of the largest regular buyers have recently had a new cause for complaint. It used to be almost unknown for unsold sugar to be stored at ports, but during the last two or three seasons, sales by the V.J.P. have lagged behind the rate of actual production, and since the mills have not access to much storage space, the sugar has had to be sent to the ports, and stored there in the warehouses of the Triangle, and other members of the V.J.P., and when sold, delivery was given at these warehouses, i.e. the buyer had, so to speak, to bring his scales to the door of the seller’s warehouse. Now some of the big exporting firms, because they are regular dealers in sugar on a large scale, have their own warehouses, or the chief delivery was given at these warehouses, or the vexation of paying warehouse charges to another while their own warehouse had been either the extra expense of moving the sugar to their own warehouse, or the vexation of paying warehouse charges to another while their own warehouse, perhaps next door, stood empty. The members of the V.J.P. realise well enough that such firms have in this matter a real grievance, and they do not wish to exploit it for their own profit. But the storage of unsold sugar was virtually unknown until three years ago, and in the absence of storage facilities at the mills there was no alternative, while they could not stomach the idea of paying for the transference of the sugar to the buyer’s warehouse when they had already had the expense of storing it prior to the sale. Many mills have recently been expanding their storage accommodation, but it takes several years before an asphalt or concrete floor ceases to “sweat” in the climate of the Java plains, and there has incidentally been a good deal of damaged sugar about recently. This grievance of the merchants is therefore on the way to being relieved, and under normal market conditions it is most unlikely to appear, for the policy of the V.J.P. has always been to sell all sugar before it is made. Orders are usually accepted by the V.J.P. for delivery within a period of two consecutive months, and within this period are executed in chronological order. The buyer is informed usually about one month beforehand the names of the mills which will supply his sugar, and that means also, for practical purposes, the port or ports at which delivery will be given, since each mill normally ships to one particular port. Details are then arranged between the buyer and the mill, or the mill’s agent at the port. The buyer pays the mill or mills direct, though, as will be seen in a moment, the V.J.P. really receives the money. Payment must be made in full on delivery: the V.J.P. also stipulate, in the case of a buyer whose credit is not well established, to their satisfaction shall be deposited within forty days after the closing of the contract. The V.J.P. makes no bad debts, and this is one of its considerable advantages as a marketing organisation, for bad debts by small buyers are no acceptable source of loss to the mills.

In theory every mill has a proportionate share in every sale contract. But since the mills produce different kinds and qualities of sugar, and since some orders are quite small, while it is desirable in other cases to meet the wish of the buyer for delivery from a certain mill or at a certain port, this is, of course, a practical impossibility. The V.J.P. does roughly approximate its sales pro rata among the mills supplying the same type of sugar, but this is mainly for convenience of working, since very few mills have had any considerable storage capacity, at any rate until quite lately. Equalisation is really effected by an approximate monthly settlement according to the “crystal” content of each lot of sugar delivered by the mills to the order of the V.J.P., with a final settlement at the end of the calendar year following the crop year. Samples are taken of each consignment, and the crystal content determined both by the mill and by an independent analyst on the part of the V.J.P. Every month the average price of the “crystal” content, and the value of the sugar, is published, and this price is charged on the sugar delivered by the V.J.P. to the buyer, at or near each port, and the mill actually paid and the V.J.P. does roughly approximate its sales pro rata among the mills supplying the same type of sugar, but this is mainly for convenience of working, since very few mills have had any considerable storage capacity, at any rate until quite lately. Equalisation is really effected by an approximate monthly settlement according to the “crystal” content of each lot of sugar delivered by the mills to the order of the V.J.P., with a final settlement at the end of the calendar year following the crop year. Samples are taken of each consignment, and the crystal content determined both by the mill and by an independent analyst on the part of the V.J.P.
of the V.J.P. Every month the V.J.P. works out the average price obtained per unit of crystal content, and the value of the sugars sold by each mill on this basis. The mills, as has been said, are paid direct by the buyers, and at the end of the month each mill receives from or pays to, the V.J.P. the difference between the sum actually paid and the value of the crystal content of the sugar which they have sold, at the average price per unit of crystal content as calculated by the V.J.P.** The V.J.P. thus acts as a clearing-house, and each mill receives the average price obtained for the crystal content of all sugar sold to date by the V.J.P. In order to stimulate the production of high-grade sugars, however, a mill, whose sugar shows a certain margin above the average crystal content, receives a bonus; this provides a very substantial addition to the income of some mills, for while their costs for chemical supervision are probably somewhat increased, in the main a high crystal content means regular and high yields, as much as or more highly skilled, care. The final receipts of the mills are subject to a levy on tonnage sold in order to provide for the expenses of the V.J.P.; but since that organisation has no capital charges to meet, and since neither the committee of management, nor even the triumvirate, receive salaries, this levy is almost insignificantly small.

### III.—The First Ten Years of the V.J.P.

The constitution and general marketing machinery of the V.J.P. has now been outlined, and it becomes possible to consider the part which it has actually played during recent years. A brief outline of the course of events since the pre-war period is, however, necessary for a proper understanding of more recent history. In 1913 Java succeeded for the first time in producing a crop of 1½ million tons.* In 1914 and 1915 there was no reduction of acreage, though, as has been already said, by the shortage of shipping in the Far East. The difficulties which then led to the establishment of the V.J.P. were not caused by any real excess of supplies, but in 1916, with the rising price of sugar, there was a further expansion of acreage, and in 1917, and again in 1918, production was approximately the 1⅛ million tons. The difficulties which then led to the establishment of the V.J.P. were not caused by any real excess of supplies, but simply, as has been already said, by the shortage of shipping in the Far East. The difficulties which then led to the establishment of the V.J.P. were not caused by any real excess of supplies, but simply, as has been already said, by the shortage of shipping in the Far East. The difficulties which then led to the establishment of the V.J.P. were not caused by any real excess of supplies, but simply, as has been already said, by the shortage of shipping in the Far East.
daily and hourly changes which are characteristic of ordinary commodity markets. To this extent the Java mills have always tried to sell forward a substantial proportion of their output, and the V.J.P. consequently continued this practice. Stock-holding has always been, and still is, regarded by the Java mills as no part of their proper functions as producers: stock-holding means risk taking, and in their view this is a function of the merchants, the producer taking quite enough risks as an agriculturist. The mills had no adequate storage capacity, and neither the desire nor the financial means to hold back supplies, nor had the V.J.P. Hence the practice was to sell as much as possible well forward, and to sell the remainder of the crop at whatever price concessions were necessary to prevent any real accumulation of stocks. The V.J.P. naturally endeavoured to choose the right moment to sell within the general period set by these limitations, but it deemed it outside its functions to wait beyond a certain time for prices to improve. It cannot be too strongly emphasised that the V.J.P. was solely a centralised marketing agency, and in no sense does it possess or exercise the powers of a monopolistic producer. Until 1926 no attempt was even made to secure differential prices in Java's special markets. That its leaders were not tempted to try the strength of the potential monopolistic powers of the V.J.P., but were content to operate as a marketing agency pure and simple, very largely accounts for the success of the organisation, and the confidence and loyalty which it gained among its members during the first ten years of its existence. But it would be idle to deny that the V.J.P. was operating under relatively favourable and easy conditions until the last three or four years; for the costs of production in nearly all the mills were, except perhaps in 1922, comfortably below selling prices. The General Syndicate of Sugar Manufacturers in the Dutch Indies has published figures for the average cost of producing 100 kilos of "crystal" sugar, i.e., costs calculated against the crystal content of all the various qualities of sugar actually produced. The figures are for gross costs, including all rates, taxes, renewals and repairs, but excluding new charges by way of extension and interest. The average price obtained per 100 kilos of crystal sugar is also published in their annual report: this is the price calculated by the V.J.P. for the equalisation of the proceeds of all sales amongst the mills. A comparison of these figures of price and cost must not be pressed too closely, but it does show that there has been at all times a margin of profit to the average concern.

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A large number of the higher cost mills must undoubtedly have made losses in 1922, though few probably on a serious scale: apart from that year, there was certainly a substantial profit for practically all the mills until 1926, while, of course, in 1929 and 1930 all made naturally enormous profits. Thus the prices which the V.J.P. obtained were on the whole satisfactory in the eyes of its members, and they were all the more inclined to be satisfied in view of the general outcry of sugar producers all over the world in 1925-26. The doubts and fears which Java might have begun to entertain in 1926 were largely dissi­pated in 1927, when a crop of 2.4 million tons was successfully disposed of at an average price of F. 16.14 per 100 kg., as compared with the F. 14.31 for the 1926 crop of under 2 million tons. In 1926 Java had been extremely lucky in that weather conditions reduced the crop by 300,000 tons, and gave it the chance to sell almost any sugar for markets west of Suez, as compared with 200,000 tons in 1925, and with the exception of British India, most of the Far Eastern markets took considerably less sugar. The V.J.P. seemed to have handled a very difficult situation with admirable success; Java got rid of her sugar, and most of the mills could claim to have made serious losses, even if few could point to large profits. Confidence in the V.J.P. was increased considerably by this year of adversity, and when in 1927 nearly every market in the East bought more than in 1926, and Europe took 200,000 tons, instead of 14,500 tons as in 1926, it seemed as if the storm had been successfully weathered. It is therefore not surprising that when, in November 1927, Colonel Tarara (from Cuba) met the leaders of the industry at Amsterdam, he found them by no means so depressed as to be interested in experiments in economic control, and the Dutch were confident that their regular markets were in no way threatened by foreign competition, and any attempt to sell " under the hammer " to its V.J.P. to prevent " wild " selling at any price would only endanger the future of the market and would not serve the interests of the growers. But it would be idle to pretend that Java was not in a very precarious position after the poor year 1927, and that the forward sales of the 1928 crop for the three seasons following 1927 was a very reasonable price in no sense. In other words, the profits of 1922 were more of the order of the figures for the average cost of producing 100 kilos of " crystal " sugar, i.e., costs calculated against the crystal content of all the various qualities of sugar actually produced. The average price obtained per 100 kilos of crystal sugar is also published in their annual report: this is the price calculated by the V.J.P. for the equalisation of the proceeds of all sales amongst the mills. A comparison of these figures of price and cost must not be pressed too closely, but it does show that there has been at all times a margin of profit to the average concern.

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IV.—THE MARKETING OF THE 1928 CROP.

While, as has been said, few if any of the Java mills anticipated the real extent of the difficulties ahead, it was, of course, realised that the 1928 crop would show a large increase. In 1927 the new cane variety P.O.J. 2878 had been grown on 121 per cent. of the total planted area, as compared with 67-5 per cent. the year before, and had given such good account of itself, that it had been planted on no less than 66-5 per cent. of the acreage for the 1928 crop, and the total acreage had resumed its slow expansion after a check in 1926. This certainty of increased supplies alone might have been enough to account for some timidity by buyers during the autumn of 1927. By January 1, 1928, the V.J.P. had succeeded in selling forward only 138,000 tons of white sugar and 250,000 tons of brown sugar. As has already been mentioned, the sales of white sugar had been at the price of F. 16.6* No further sales of white sugar were made by the V.J.P. until February 24, when the first of a series of transactions totalling 500,000 tons was made at F. 15. On March 29 the V.J.P. accepted no bids under F. 15-25, and after a couple of thousand tons had changed hands at this figure, business came to a complete standstill until July. Much the same happened with brown sugar. It was clear that a permanent selling or an attempted stampeding of the market by the big buyers, Java could not survive until the mortality amongst other producers brought world production again into line with consumption. Besides, it seemed as if Cuba was determined on a substantial measure of restriction whatever the outcome of Tarafa's negotiations in Europe, and if Cuba did carry out these plans, so much the better for Java: 1928 might even be a comparatively prosperous year after all. It was true that forward sales of the 1928 crop were proceeding somewhat slowly, but consumers must be allowed a little time after their active purchasing in the past season, and F. 16 for white sugar was a very reasonable price under the circumstances. In other words, the real extent of difficulties of 1928 were more or less unsuspected either in Holland or in Java.

Summarising the activities of the V.J.P. down to 1927, the generalisation may be drawn that it had marketed wisely and well, and made the most of the generally favourable conditions resulting from the usually adequate margin between costs and proceeds. The argument that there was in general a substantial margin between costs and proceeds down to 1926 or 1927 is, of course, open to the reply, that the proceeds were so high largely through the action of the V.J.P., but, as has already been said, the V.J.P. had no power to influence prices except in the short period, and never attempted to do so: the general price level of these years was the competitive price level, and the true merit of the V.J.P. is that it secured this "economic" price in full for the producers. The way which necessarily follows individual selling in a buyers' market, and thus secured most if not all that buyers were really prepared to pay. But it cannot be said to have been thoroughly tested in really heavy weather—that was now to come.
position of the mills is specially strained in June, even when forward sales and conditions generally are normal. Now, at the beginning of July, they had little money left, and nothing in sight to meet the heavy expenses of the harvest. The position was becoming desperate, and it seemed to those on the spot that the Triumvirate in Holland, in their determination to force buyers to give in first, were not only completely out of touch with the market, but absolutely unaware of the essential economic factors of their industry. Eventually the Triumvirate threw up the sponge, and on July 17, accepted bids for white sugar at F. 13.5-25, which involved a similar reduction, though in this case F. 1 of it had been given on July 2. Sales at these prices then continued in very fair volume for the next two months.

It would not seem easy to understand why the Triumvirate so obstinately refused to lower their prices when all the circumstances seemed to point to the inevitability of such a course. In particular the attempt to raise the price of Whites at the end of March appears most ill-judged. But a very substantial explanation is to be found in the course of events in the second-hand market. The whole of the 1927 crop had been sold forward by the Triumvirate during that summer, and sugar for immediate delivery could therefore only be obtained in the second-hand market. During the spring of 1928 it was discovered that exports were exceeding all expectations, while the domestic requirements of Java had been under-estimated and retailers became extremely short of supplies. Buying became very active, and at the end of March the second-hand price had reached no less than F. 17. On March 20 the V.J.P. put up its price for the new crop to F. 15.25, but even though there was still such a disparity, buyers were not tempted. After a temporary decline the second-hand price mounted higher than ever, and a number of transactions were made. Both British India and Java were extremely short of stocks, and on May 1 there was under 7000 tons in the port warehouses. By the middle of May, new crop supplies were becoming imminent, and there was a sudden drop to F. 15.06, i.e. below the V.J.P.'s price for new crop sugar. As the new crop sugar began to come forward, buyers became still more easy in their minds, and by the middle of June, new crop sugar for immediate delivery was to be had for F. 14. Up to this point, therefore, the policy of the V.J.P. became intelligible. But when account is thus taken of the second-hand market. The V.J.P.'s price of F. 15.25 now appears not too high but almost too low in the face of the price ruling in the second-hand market, and the Triumvirate may be excused for thinking, as perhaps they did, that if such a difference between old and new crop prices did not tempt buyers, they would not be tempted however much the real strength of the demand for the new crop would be. The Triumvirate in Holland may also have been deceived by the great strength which the European demand was developing during the spring for the limited supplies in the hands of the Cuban Export Corporation, and by the surprising way in which under all the circumstances the New York quotation was holding up. The Triumvirate may have thought that Europe would take any balance of the coming Java crop which was not required in the Far East. Finally, the size of the coming crop in Java was under-estimated. It is, in fact, difficult to blame the V.J.P. until about the middle of June. But during the next month, they probably lost a lot of money in one way and another. Buyers may not have been very eager or numerous at the F. 25 level, but what they were buying, they were buying from the non-associated mills, and not from the V.J.P. The non-associated mills appear to have sold a good deal of their output at about F. 14 during the end of June and the beginning of July. The Triumvirate may have hoped, that when buyers had exhausted the supplies of non-association sugar they would be compelled to turn to the Association, and with an increasing consumption both in the Far East and in Europe, the V.J.P. would be able to get F. 15. But the increase in demand was, in fact, fading away, and so also were the prospects of even a F. 14 price-level. When eventually difficulties of financing and storage compelled the Trust to sell, it certainly did the right thing in coming down to F. 15-50 at one blow, and then holding out firmly for that price. A series of small reductions would have completely shaken the faith of buyers. While, therefore, the V.J.P. may be criticised for allowing the non-associated mills to skim the cream off the market during June-July, it must be acquitted of the much larger error which it would appear to have committed if
events in the second-hand market are over-looked. Their fault lay as much in letting go their sugar too cheap in 1928 as in wanting an impossibly high price in 1928. While sales proceeded at a fairly normal rate during August and September, the Far Eastern markets were showing no signs of the improvement which had been hoped for, but rather some decline. The great increase of production in Formosa resulted eventually in a halving of the huge exports from Java to Japan, which had been reaching between 400,000 and 500,000 tons. Demand in Europe was still satisfactory, but Cuba had increased its original allotment to the Export Corporation for sale outside the U.S.A., and that body's clever final sale of the 300,000 tons transferred from the American allotment, had relieved Europe of any pressing necessity to have recourse to more costly supplies from Java. Consequently at the end of September the V.J.P. still had over 1 million tons unsold, and the prospects of selling it at F. 13-50 were remote. A substantial lowering of its acceptance prices might have stimulated demand, but it would have inflicted enormous losses on the exporting firms which had more or less satisfied their requirements at F. 13-50. If, in fact, the V.J.P. had lowered its price to, say, F. 12-50, most of its largest and most regular customers would almost certainly have been ruined, and the V.J.P. had not the smallest desire, let alone the machinery, to sell direct in consuming countries. Hence recourse was had to a differential price policy. The V.J.P. announced publicly that it was open to consider sales at F. 12-50, white sugar for shipment east of Suez, and the following limits were quoted—white sugar for shipment east of Suez F. 13-50 (i.e. the price at which it had been selling generally since July), and for shipment west of Suez F. 12-50; brown sugar F. 12-50 and F. 10 east and west of Suez respectively. This public declaration of its limits was a proceeding almost as unique as the differential price policy itself. During the end of September and the first half of October, 277,000 tons of Whites were sold for shipment west of Suez either at F. 1 or F. 1-50 rebate, and there were similar large transactions in brown sugars. Meantime small sales of Whites at F. 13-50 were proceeding. Finally, on December 15 the remaining balance of the allotment amounting to 268,000 tons, was cleared at F. 12-50 irrespective of its destination. The V.J.P. thus managed to dispose of this record crop of nearly 3 million tons, and the average price on the basis of crystal content worked out at F. 13-70, which was also a post-war record in the opposite direction. On the whole the V.J.P. may be said to have surmounted great difficulties with considerable success, although undoubtedly it had increased those difficulties by its tardiness in June-July to recognise the lower price level necessitated by the size of the new crop, and by the flagging of demand in its own Far Eastern markets. Its differential price policy caused great indignation amongst the European beet producers, and raised a storm of protest from British India, but this was only to be expected. The V.J.P. had recourse to such practices most unwillingly, but their only alternatives were either to ruin the exporting firms in Java, which would have been madness, or to hold large stocks, the very idea of which was abhorrent, while the machinery for financing as well as storage space were both virtually non-existent. In the circumstances they must be judged to have taken the best possible course.

V.—THE MARKETING OF THE 1929 CROP.

While the 1928 crop was thus being disposed of, sales of the 1929 crop had also been proceeding. Up to March 23, 1929, the total forward sales of white sugars amounted to approximately half a million tons, but of this, 306,000 tons was accounted for by a single sale on December 27, 1928, to a firm of European exporters. Since another European exporter had bought up the balance of the 1928 crop (268,000 tons), these two firms virtually controlled the available supplies of white sugars up to the end of May 1929 (assuming that grinding began at a normal date, which it in fact did). As other exporters and merchants had made heavy short sales, these two firms were able to depress a mild "corner," and by the end of March they had forced up the second-hand price of Whites to F. 26-75, as compared with the V.J.P.'s price of F. 13 for June delivery. As in 1928, though under entirely different circumstances, the second-hand price thus went far above the V.J.P.'s price for June delivery, and consequently sales by the V.J.P. completely ceased. Moreover, the prospects were for an even larger crop in Java, since the new cane P.O.J. 2878 had been planted on no less than 93 per cent. of the
In Cuba was steadily driving down prices in the Western Hemisphere, and the New York quotation had fallen below the 2 cent level early in the year. As the mills began to grind, the second-hand price rapidly dropped from its peak of F. 17.25 early in April to F. 12.75 early in June, and the V.J.P. wisely lost no time in reducing its limit from F. 13 to F. 12, which was signalled by a sale of 160,000 tons on June 7. But this reduction failed to stimulate any general burst of buying, as a similar reduction had done in the previous July. This time buyers appear to have thought that the position of the mills was so desperate that they had only to hold out for a few more days and the V.J.P. would be on its knees. But the Triumvirate made no further move, though by the end of June they were being subjected to the sharpest criticism and even some abuse in Java; it must not be forgotten, however, that the sugar men of Java can only rage impotently so long as Holland remains unmoved, just as the rubber kings of Malaya are but the vassals of Mincing Lane. Nevertheless, serious difficulties were arising. The financial results of 1928 had not increased the liquid reserves of the mills, and with the usual heavy costs of planting, and with grinding in full swing, many of them ran short of money. Production had been proceeding at some mills for six weeks by the end of June, and nearly all had been at work at least a fortnight. Sugar was already being stored and in many cases warehouse charges had to be paid in addition to all the normal cash expenditure. With the sugar actually made, it may be thought that the mills would have had no difficulty in obtaining advances therefrom. But when the mills applied to the banks, the latter pointed out that by the constitution the Java bank would not rediscount such paper. It was, in fact, essentially a mortgage operation as that, which was very shortly to arise in Cuba as the result of the establishment of the Single Selling Agency. In Cuba it was a real genuine difficulty, since there were only foreign banks and no national bank in Java it was a mere technical difficulty, and was easily surmounted by the banks allowing the mills to overdraft on condition that their sugar was consigned only to the V.J.P. and then drawing bills of their own for sale to the Java bank. But the fact that such a difficulty arose, shows how completely Java had lathario relied on forward sales, and how entirely novel was any stock-holding by the mills, at any rate in the early part of the season.

The situation was therefore becoming critical at the beginning of July. As in the previous year, it was a question of who could afford, and hold out longest, the V.J.P. or its customers. This time it was the latter who gave way, partly because consuming markets were getting too short of supplies, partly because the Java crop was not fulfilling expectations and was now likely to show little or no increase on 1928.* and partly also perhaps because negotiations in Cuba for the establishment of the Single Seller were beginning to cause a sharp rise in prices in the Western Hemisphere. At the end of the first week in July, substantial transactions were made at F. 12 for white sugar, the same price as the sales of the previous month, and buyers, realising that there was going to be no further reduction, rushed in to buy. After 400,000 tons had been sold at this price, the Trust was able to raise its limit to F. 124, and then to F. 13, without deterring buyers. Throughout, the marketing of brown sugars had roughly followed the same course as Whites, and now very large sales of Browns were also made, the sales at F. 124, and rising, to F. 12. By July 25 nearly 2,100,000 tons had been sold, or rather more than two-thirds of the crop. Buying then faded away nearly as rapidly as it had begun. Immediate needs had been satisfied, and exporters, wondering whether the buyers were really justified, and unwilling to increase their commitments or to speculate for a further rise when nearly 1 million tons remained unsold, had decided to call a halt. Discontent and dissatisfaction in Java were allayed. The Triumvirate had held out for a a minimum of F. 11.5, and they had got it, if only so to speak by the skin of their teeth. The delay had meant charges for loans and costs of warehousing for many mills, but the large sales at F. 124 and 13 would cover this, and leave a margin which few had expected to get. For, after all these great men in Holland had not played their cards too badly! Nevertheless, nearly 1 million tons remained unsold, and now buying had ceased. In the end, much of this unsold stock would perhaps have to be dumped west of Suez at special prices, and probably very low ones. British India had been so offended by this policy in 1928 that she was looking more towards Europe than Java, and perhaps

*The 1927 crop was officially proved to be 2,983,000 tons, as compared with 2,988,000 in 1926.
Europe would be able to supply more than in previous years at attractive prices. Production in Formosa had been still greater, and Japanese imports from Java had not recovered, though the extension of many Japanese refineries was resulting in a policy of buying Java sugar to make up their capacity requirements and then dumping the refined product in China: this was a saving grace from Java's point of view, for otherwise exports to Japan would have dwindled still further. The rise in the price of Cuban sugar had been checked by the postponement of the Single Selling Scheme, and it was still very doubtful whether it would really raise prices in the long run. Altogether the prospects were not too bright, and the margin of profit, even at F. 12, was not so comfortable as many mills would have wished. Hence, as August drew on and no further sales were made, criticism of the Triumvirate revived. But somewhat to the surprise of the market, on September 5th the V.J.P. made various sales totalling 160,000 tons of Whites at F. 13, an advance of 50 cents. This was the beginning of another burst of buying, and within a week a further 185,000 tons of Whites were sold at the same price, the last 10,000 tons at F. 13.1. Large sales of Browns were also made at correspondingly higher prices. At the same time there was a comparatively brisk opening of forward sales of the 1930 crop; nearly 60,000 tons of Whites were sold at F. 14, and the same quantity of Browns at F. 12.50. But by mid-September buying once more subsided almost completely, and there was very little business either in the current or future crop for the rest of the year. The Triumvirate could have sold out its Whites at F. 13, but in raising its limit to F. 13.50 it had choked demand. Bids at F. 13 were still being made in November, but the Triumvirate evidently hoped that supplies would run short before the new crop arrived as in 1928, and that it would be able to round off its successes. At the beginning of 1930 it still had about 150,000 tons, and the second-hand market price was well below its limit. Very slowly small sales were made at descending prices until F. 10 was reached, but eventually the Triumvirate had to put its pride in its pocket and clear out the trade custom that sales for May–June delivery are of new crop sugar. Meanwhile there had been no important forward sales of the 1930 crop since September 1929.

VI.—THE V.J.P. AND ITS PROBLEMS.

With no desire whatever to withhold praise where praise is due, it nevertheless seems hard to deny that the V.J.P.'s relative success in 1929 was less due to judgment than to sheer good luck. In September commodity critics had founded all its critics in Java, and the general opinion was that whereas the Triumvirate had seemed fools if not knaves, they had, in fact, shown themselves to be extraordinarily wise and long-headed. Java is proud of the V.J.P., and everyone was glad to be able to turn from criticism to praise. But, in fact, the burst of buying in July was actually precipitated by the rise in prices in the Western Hemisphere. Buyers in Java could probably have waited a few weeks, though of course they were bound to buy fairly soon or consuming markets would have run short of supplies. But it is extremely questionable whether the V.J.P. could have held out much longer, not only on account of the physical problem of storage, but also because the indignation of some of its members might well have led to a breakaway. The rise in prices in the Western Hemisphere was partly due to the continuous rise of demand in Europe, and to that extent may have been foreseen by the Triumvirate. But in the main it was due to the anticipations that Cuba would adopt Tarafa's Single Seller Scheme, and as that scheme was hardly on the minds of many mills it is at least arguable that the V.J.P. could afford to speculate with it, but if this was their attitude, it betokens a definite change in the judgment of policy, though one which in any case was being thrust upon them, whether they liked it or not.
Until 1928 and 1929 the policy had been to sell forward, and leave the exporters and dealers to perform the risk-bearing function of holding stocks. If, at the end of a season, the V.J.P. realised that its forward sales had, in fact, left the exporters with large profits, it did not begrudge them such profits. The forward sales had been made at prices which gave the mills a reasonable return, and the profit subsequently made by the exporters was their reward for the risks of values changing before the sugar was delivered to them, and in turn passed on. But it is obvious that this attitude depended very largely on the forward sales realising prices which did give the mills a reasonable return; if the V.J.P. could only sell forward at prices which little more than covered costs, its members would naturally tend to be indignant if the exporters subsequently made large profits. Hence, as prices dropped to the relatively low levels of 1928 and 1929, the V.J.P. was inevitably driven to exact the best possible terms. The exporters and merchants in Java are unanimous in their complaint that the V.J.P. has been leaving them an entirely insufficient margin of profit, and while they would normally tend to keep their commitments in bounds on a falling market, the fact remains that during the last two years they have adopted a purely hand-to-mouth policy, and the V.J.P. have not been able to make adequate forward sales at prices which it was willing to accept. The V.J.P. has therefore been forced to take over a substantial part of the risks of changing values, because the exporters required a greater margin for bearing them than the V.J.P. was prepared to give. Either the V.J.P. or the exporters must perform this risk-bearing function, and if the former are unwilling to do so, then they must offer sufficient inducement to the latter to buy freely well in advance, even if at prices which leave profits small or even involve them in losses. For a single season, or even two or three seasons, the V.J.P. may squee the exporters, and the V.J.P. will then be involved in still further commitments, and if this policy is continued, the V.J.P. will be unable to take over any role in the market, while the exporter will be totally exposed to all the risks. However, the export trade of Java is extremely complex, and the V.J.P. has been unable to perform the marketing as well as the risk-bearing functions which are now discharged by the exporters. This would be no simple matter for the V.J.P., because the markets for Java sugar are so many and so diverse as to require intimate local knowledge, while it must be remembered that Java's white sugars require no further refining process for the Eastern Hemisphere, and which therefore the exporters require no further refining process for the Far Eastern markets, and therefore the exporters deal in relatively small quantities with a very large number of wholesalers, and do not simply pass on the sugar in large consignments to a comparatively few refineries. There is here a vast difference as compared with Cuban sugar. The marketing of Java sugar is, in fact, a most intricate operation, and the V.J.P. probably realises as well as anyone the tremendous difficulties which they would have to surmount, if they attempted to take over entirely the production and selling of large firms which have built up an elaborate network of branches and connections all over the Eastern Hemisphere, and which have, under the stimulus of keen competition, achieved a high standard of specialised skill in this particular work. The V.J.P. could, of course, retain their services as distributors by paying them a commission to market the crop on its behalf, but while the exporting firms would be more than content to undertake this for 1% or even perhaps 1½ per cent., the V.J.P. would, of course, be altogether too much in their hands, and the whole position from its point of view would be impossibly treacherous and difficult.

The V.J.P. therefore has two alternatives. The first is to pursue a liberal policy of "live and let live," with the exporters as in the past, but with the realisation that unless Java's costs can be further reduced and kept down much below the costs of other competing producers—and this without entailing any excessive increase in the size of the crop—such a policy may entail less satisfactory results than in the palmy days of the past, and even losses when exporters subsequently make a profit. The second alternative is to take up to its own shoulders the functions both of risk-bearing and distribution which have hitherto been performed by the exporters, and dispense with the latter's services altogether. But whatever the feelings of the great concerns in Java are towards the V.J.P., it is certain that the members would naturally tend to be indignant if the exporters subsequently made a profit, and the V.J.P. may be driven to exact the best possible terms. If the V.J.P. is to remain in existence at all, it must absorb all the risks of this business, and it should not be considered a nightmare, while the idea of reorganising the V.J.P. has been left in a most convenient state to avoid all the risks involved in the sugar business in Java. The V.J.P. therefore has two alternatives. The first is to pursue a liberal policy of "live and let live," with the exporters as in the past, but with the realisation that unless Java's costs can be further reduced and kept down much below the costs of other competing producers—and this without entailing any excessive increase in the size of the crop—such a policy may entail less satisfactory results than in the past, and even losses when exporters subsequently make a profit. The second alternative is to take up to its own shoulders the functions both of risk-bearing and distribution which have hitherto been performed by the exporters, and dispense with the latter's services altogether. But whatever the feelings of the great concerns in Java are towards the V.J.P., it is certain that the members would naturally tend to be indignant if the exporters subsequently made a profit. The second alternative is to take up to its own shoulders the functions both of risk-bearing and distribution which have hitherto been performed by the exporters, and dispense with the latter's services altogether.
a complicating factor in large-scale business organisation. Even if they were successfully to establish machinery for direct marketing, it is almost certain that detections from the ranks of the V.J.P. would rob them of that limited but substantial control of price which they achieved in the short period they now possess, and thus they would probably lose on the swings anything they might gain on the roundabouts.

In short, the V.J.P. has for practical purposes only the first alternative: the exporters have the whip hand in the long run. It may, however, be asked why the V.J.P. should not continue at least for a time to handle the crop as it did in 1928 and 1929. By waiting to sell until the beginning of the harvest, it reduces the amount of risk which the exporter has to undertake if he buys forward earlier; thus the exporter need not be allowed so great a margin, and provided the mills can ship out their sugar to buyers more or less as it is produced, all stock-holding problems are avoided and a flow of cash begins when really necessary. The producers and the exporters would then share the risks and the payment between them, and in the long run neither would be any the worse off. But this means that the non-associated firms would always be in a position to skim the cream off the market by selling their output before the V.J.P., at prices below the V.J.P.'s current limit but a little above the level to which that limit would eventually be reduced. This happened in 1929, and it was the greatest cause of annoyance and dissatisfaction amongst the V.J.P. members. Every member felt that it would be to his advantage to leave the Association and be free to sell his sugar, provided, of course, that all the rest continued their membership. The fear that the Trust would do the same again in 1930 was the cause of much similar argument during the winter of 1929-30. Such feelings among the membership mean the beginning of the end in all kinds of cartel organisations, and the V.J.P. can ill afford to lose members. If the V.J.P. continue to operate as in 1929, internal disruption will shortly end its career. It cannot stand still, and since it strongly objects to going forward, its only means of salvation is to go back.

If the V.J.P. endeavours to return to the practice of selling a substantial amount of the crop forward, the real difficulty again is to keep its members satisfied. If the prices so obtained afford no profits to the mills, or even mean small losses, the mills will be inclined to blame the Trust, and to think that they could do better themselves. On the other hand, if prices fall so low that practically all the mills are losing heavily, they may feel that unity is their only chance of survival. In other words, the Trust has probably more to fear from prices which are close around the average cost of production than when they are very definitely below it. No statistics of costs have been published since 1926, when the gross cost was F. 15-90, i.e. inclusive of rates, taxes, renewals and depreciation. The introduction of the new cane variety P.O.J. 2878 with its 25-30 per cent. increase in yield has probably produced a very considerable reduction of costs. Various figures were given me by different authorities when I visited Java this spring, varying between F. 10 and F. 11 per 100 kg. Some mills can probably produce at F. 9, and the cost of producing 75 per cent. of the crop may be under F. 10, but the average for all mills is probably about F. 10-90. In 1929, therefore, practically all mills covered their costs, but taking into account warehouse and financing charges, an appreciable number probably had little margin of profit. As has been said, there was much criticism of the V.J.P., but in the end things turned out much better than had been anticipated. If in 1930 prices had been such as to give an average of F. 10-11 on the basis of crystal content, there would be least prevent competitive selling by the mills in a buyers' market. This, and its prevention of losses through bad debts, are its main merits. If these advantages seem small in comparison with the reputation which the V.J.P. possesses, they are nevertheless not to be minimised. There has been much misconception of the Trust's powers of the V.J.P., as well as of the rôle it was intended to play; it is not a "Trust" in the normal sense of that word, and it is not capable of the degree of control over prices and output which are associated with that appellation. On the other hand, it has not to face the manifold and great difficulties which any real attempt at artificial control involves, and the very limited application of such powers as it does possess has been its great strength in the past. If the Java sugar industry allows the V.J.P. to be dissolved, it will be breaking up an extremely useful tool, simply because it could not do work for which it was never designed or intended.
In concluding this study, however, it is impossible to avoid some discussion as to whether the Dutch are right in refusing to face the difficulties of stock-holding and direct marketing. The V.I.P. cannot stand still, and it will have to go back, since there is undoubtedly too much opposition to a forward march. But is this opposition sound? On the whole, in my opinion it is sound. As has been said, Java does not sell to a handful of refiners in one or two countries, or in essentially similar markets, as, for example, does Cuba. If it supplanted the exporters, the V.I.P. would have to sell in small lots to many buyers in many widely differing countries, and it seems extremely doubtful whether a V.I.P. reconstituted for this purpose would be able to discharge these specially difficult risk-bearing and merchandising functions as well as do a number of firms, most of whom specialise mainly or at least in part on particular markets, and whose other activities can be dovetailed into their sugar business with considerable advantage all round. Moreover, as regards risk-taking, it must not be forgotten that the Java mills produce the cane themselves, whereas in most other countries the mills purchase their supplies of cane on some sort of profit-sharing arrangement, and thus incur little risk on the agricultural side of the mill: hence they can afford to undertake considerable risks with the sugar when made. On the other hand, it is, of course, the very fact that in Java the cane is produced by the mills, which makes it possible to sell the crop before it is milled. In Cuba, for example, a mill which wished to sell forward would have to alter completely its traditional relations with its colonos, for it would have to arrange to buy the growing cane at a definite price, and it would be most difficult to arrange detailed conditions as to tonnage of cane and its yield, such as would preserve the colonos' interest in the proper care of the crop after it had been sold. But even if the Cuban mills did offer to sell forward, there is little inducement for the refineries, like the tin-smelters in Malaya, hold too large quantities in process and in stocks to permit speculation; their business is refining and not speculation on changing values, and so they hedge passively with their purchasing, and if they did want to speculate, it is much easier to do so in the New York terminal market than in definite contracts with Cuban mills. Similarly, if a Cuban mill wishes to pass on its risks, it can do so much more simply by speculation in New York than by making contracts with refiners. Java's trade is so entirely different that what is possible and advantageous in its case, is by no means so in the case of Cuba, and vice versa. It is virtually impossible for Cuba to have a Single Selling scheme which does not leave the Cuban mills with any less risk-bearing than they at present undertake. It is perfectly possible for Java to have such a scheme without adding commercial risks to the agricultural risks already undertaken by the Java mills. It is virtually impossible for Cuba to operate a Single Selling Scheme satisfactorily without adequate financial backing, such as Cuba cannot provide. It is perfectly possible for the V.I.P. to gain solid advantages for the Java producers without any financial backing whatever, even though Java could undoubtedly provide whatever finance was necessary. On the other hand, whereas a strong Single Seller with adequate financial backing might very well be of the greatest advantage to Cuba, it is extremely doubtful whether it would be of any benefit to Java. On the agricultural side the two countries are as different as they are geographically distant from one another, and the same is nearly as true of their whole commercial environment and problems.

This recognition of the soundness of the Dutch attitude is strengthened when one considers that Java is still the lowest cost producer in the world. Admittedly some of the large American mills in Eastern Cuba can probably produce more cheaply than perhaps the very best mill in Java, but Cuba cannot produce 3 million tons as cheaply as can Java. While many people in Java have wished that the new cane P.O.J. 2878 had not been discovered at the precise moment at which it was discovered, it is extremely doubtful whether the resulting reduction in costs did not outweigh the pressure of the larger supplies on selling prices even in 1928 and 1929. Prices in the Eastern Hemisphere depend not only on the Java crop, but on the production in India and other Asiatic countries, and, further, on conditions of supply and demand in the Western Hemisphere. The heavy fall in prices in Europe was bound to cause a fall in Asia, and though the increased supply of Java crop assisted to press down the Eastern price farther than it would otherwise have gone, the Eastern price would have fallen considerably in any event. Java is certainly better able to face the crisis of 1930 with P.O.J. 2878 than without it, even though it is not quite living up to early expectations. If the V.I.P. refuses to carry over a substantial amount of sugar, the way will be clear for a rise of prices.
to more reasonable levels, and the crisis will not be unnecessarily prolonged by large stocks weighing on the market. Some more mills will doubtless pass into the control of the banks, but this is probably better from Java's point of view than the risks and difficulties involved in stock-holding on a large scale or other attempts at control. The V.J.P., however, appears to be prepared to hold substantial stocks. Up to the middle of August, the total sales of 1930 crop sugars have amounted only to 414,000 tons. If the V.J.P. carries over say 1 million tons into 1931, the prospects of a return to a reasonable price-level are thereby diminished, and the V.J.P. may come to wish that it had shouldered a big loss in 1930 rather than hung such a mill-stone round its neck.

Nevertheless, since Java is the world's lowest cost producer, so she will feel the pressure least and the ensuing relief most. Costs can probably still be reduced much further in Java, both in the long run and more or less immediately, though the latter may involve some temporary reduction in efficiency. Even at this time of acute crisis, the Dutch may well conclude that the sugar industry of Java will survive to enjoy the prosperity which will in due course return, when a sufficient volume of capacity has been closed down in other countries.

APPENDIX.—STATISTICAL TABLES.

Note.—The following tables present only such statistics as are specially relevant to the present study. The figures are mostly taken from Gijselman and Steup's Annual Reviews, and from the Annual Report of the Sugar Producers' Association of the Netherlands Indies.

For statistics relating to the world market, reference should be made to pp. 42-43.

### TABLE I

**SUGAR PRODUCTION OF JAVA.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (900 metric tons)</th>
<th>Percent used by sugar mills before May 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1914</td>
<td>1,451</td>
<td></td>
</tr>
<tr>
<td>1915</td>
<td>1,429</td>
<td></td>
</tr>
<tr>
<td>1916</td>
<td>1,437</td>
<td></td>
</tr>
<tr>
<td>1917</td>
<td>1,418</td>
<td></td>
</tr>
<tr>
<td>1918</td>
<td>1,392</td>
<td>79</td>
</tr>
<tr>
<td>1919</td>
<td>1,392</td>
<td>80</td>
</tr>
<tr>
<td>1920</td>
<td>1,374</td>
<td>42</td>
</tr>
<tr>
<td>1921</td>
<td>1,371</td>
<td>90</td>
</tr>
<tr>
<td>1922</td>
<td>1,371</td>
<td>75</td>
</tr>
<tr>
<td>1923</td>
<td>1,343</td>
<td>86</td>
</tr>
<tr>
<td>1924</td>
<td>2,391</td>
<td>93</td>
</tr>
<tr>
<td>1925</td>
<td>2,086</td>
<td>35</td>
</tr>
<tr>
<td>1926</td>
<td>2,086</td>
<td>31</td>
</tr>
<tr>
<td>1927</td>
<td>2,086</td>
<td>36</td>
</tr>
<tr>
<td>1928</td>
<td>2,086</td>
<td>31</td>
</tr>
<tr>
<td>1929</td>
<td>2,086</td>
<td>35</td>
</tr>
<tr>
<td>1930</td>
<td>2,086</td>
<td>36</td>
</tr>
</tbody>
</table>

* Provisional.

### TABLE II

**DESTINATION OF EXPORTS OF JAVA SUGAR BY CROP YEARS (MAY 1—APRIL 30).**

<table>
<thead>
<tr>
<th>Year</th>
<th>Crop 1910</th>
<th>Crop 1921</th>
<th>Crop 1922</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(incl. carry-over of 22,000 tons)</td>
<td>(incl. carry-over of 24,000 tons)</td>
<td>(incl. carry-over of 7,000 tons)</td>
</tr>
<tr>
<td>West of Suez</td>
<td>380</td>
<td>14</td>
<td>209</td>
</tr>
<tr>
<td>British India</td>
<td>782</td>
<td>418</td>
<td>450</td>
</tr>
<tr>
<td>Japan and Korea</td>
<td>409</td>
<td>401</td>
<td>382</td>
</tr>
<tr>
<td>China</td>
<td>206</td>
<td>150</td>
<td>206</td>
</tr>
<tr>
<td>Hongkong</td>
<td>130</td>
<td>136</td>
<td>134</td>
</tr>
<tr>
<td>Singapore and Penang</td>
<td>115</td>
<td>103</td>
<td>103</td>
</tr>
<tr>
<td>Spain</td>
<td>82</td>
<td>18</td>
<td>26</td>
</tr>
<tr>
<td>Other countries</td>
<td>8</td>
<td>18</td>
<td>96</td>
</tr>
<tr>
<td>Total</td>
<td>2,097</td>
<td>1,749</td>
<td>2,134</td>
</tr>
</tbody>
</table>

(Thousand metric tons.)
<table>
<thead>
<tr>
<th>TABLE III.</th>
<th>STOCKS OF SUGAR IN JAVA PORTS, (100 metric tons.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning of Month</td>
</tr>
<tr>
<td>May</td>
<td>May</td>
</tr>
<tr>
<td>June</td>
<td>38</td>
</tr>
<tr>
<td>July</td>
<td>33</td>
</tr>
<tr>
<td>Aug.</td>
<td>12</td>
</tr>
<tr>
<td>Sept.</td>
<td>16</td>
</tr>
<tr>
<td>Oct.</td>
<td>19</td>
</tr>
<tr>
<td>Nov.</td>
<td>21</td>
</tr>
<tr>
<td>Dec.</td>
<td>21</td>
</tr>
<tr>
<td>Jan.</td>
<td>21</td>
</tr>
<tr>
<td>Feb.</td>
<td>21</td>
</tr>
<tr>
<td>March</td>
<td>21</td>
</tr>
<tr>
<td>April</td>
<td>21</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>TABLE IV.</th>
<th>ANNUAL AVERAGE SELLING PRICES OF V.J.P. WHITE SUGAR (SUPERIOR HEAD SUGAR) (as estimated by the Amsterdamsche Bank).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Year</td>
</tr>
<tr>
<td>1928</td>
<td>1928</td>
</tr>
<tr>
<td>1929</td>
<td>1929</td>
</tr>
<tr>
<td>1930 (mid-August)</td>
<td>1930</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE V.</th>
<th>AREA PLANTED WITH CANE AND YIELD PER HECTARE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>Area Planted (000 hectares)</td>
</tr>
<tr>
<td>1938</td>
<td>300</td>
</tr>
<tr>
<td>1939</td>
<td>300</td>
</tr>
<tr>
<td>1940</td>
<td>300</td>
</tr>
<tr>
<td>1941</td>
<td>300</td>
</tr>
<tr>
<td>1942</td>
<td>300</td>
</tr>
<tr>
<td>1943</td>
<td>300</td>
</tr>
<tr>
<td>1944</td>
<td>300</td>
</tr>
<tr>
<td>1945</td>
<td>300</td>
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<tr>
<td>1946</td>
<td>300</td>
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<tr>
<td>1947</td>
<td>300</td>
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<tr>
<td>1948</td>
<td>300</td>
</tr>
<tr>
<td>1949</td>
<td>300</td>
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