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Whittlesey (Charles R.)

Governmental control
of crude rubber - the
Stevenson Plan.



APPENDICES

APPENDIX A

PROPOSALS FOR RELIEVING RUBBER DEPRESSION, BRITISH MALAYA, 1921

I. Scheme of the Rubber Growers' Association Producers' Corporation, Ltd.¹

A. The objects of the scheme were:

1. To control the rubber output of its members.
2. To fix the selling price and regulate the sale of the rubber produced by its members.
3. To regulate the opening of further rubber land by its members.
4. To purchase, or make advances on the rubber harvested or to be harvested by its members and if deemed desirable to make advances on security, and on terms to be agreed, to approved rubber estates belonging to its members.

B. The proposed methods to be followed were:

1. To form two corporations, one in England and one in Holland, the British corporation to have a nominal capital of £2,000,000 with power to borrow up to £8,000,000 by debentures or otherwise.
2. The raising of the sum of £2,000,000 was to be conditional on producers owning 2,000,000 acres subscribing to the extent of £1 per acre but it was not anticipated that more than 10s. per acre would ever be called up; and that at 2s. 6d. every three months.
3. The capital raised or money borrowed was to be used to purchase or make advances against rubber or rubber properties.
4. No interference with the working of estates or methods of selling rubber was contemplated but members were to be required to adhere to any measure of restriction for the time being fixed by the Court of Directors. Also members were to submit to a deduction from the price of all rubber sold of an amount to be fixed from time to time by the Court of Directors. Brokers were to be responsible for making such deductions and paying them over to the Corporation.
5. The deductions were to go to pay for the management of the Corporation, interest on debentures, and to provide a sinking fund for redemption of debentures.
6. No government assistance was contemplated in the scheme.
7. The plan aimed at fixing prices at a reasonable level (which, it was claimed, could be done if 70% of the growers would support it) and at helping financially those who required help and could offer security.

¹*PAM Report*, 1922, pp. 11-14.

II. Scheme of Dr. Braddon³

A. The objects of the scheme were:

1. To create a security upon which money could be borrowed to finance producers during any such period of total cessation of production as might be necessary to balance supply and demand.
2. Thereafter by control of output to fix prices of rubber at a profitable level.

B. The proposed methods to be followed were:

1. To form a body to be called "Rubber Shareholders' International Assurance Association."
2. To raise an authorized capital of £12,000,000 by the issue of bonds carrying 12% interest and redeemable over five years, one-fifth being redeemed yearly.
3. The security offered to bond holders or investors was to be the value of 252,000 tons of rubber to be produced yearly for five years. This figure was based on 70% of the growers coming into the scheme and on a total full capacity production per annum of 360,000 tons.
4. The capital raised was to be advanced to producers who were members, on the basis of 8d. per pound of rubber restricted. These advances were to carry no interest and were to be repayable, by deduction from selling price, over five years.
5. The Association was to have its headquarters in England and to be managed by a Central International Council representing the whole body of producers in all countries. The council members were to be elected by the boards of companies in the different countries.
6. The scheme set out a scale of prices which would be fixed according to the percentage of full capacity production which consumers could produce, the cost of working the Association, interest on bonds, and redemption of bonds.
7. Membership was to be open to all growers who produced five tons or more annually. Such were to be proprietary members. Dealers, workers, and buyers on their own account were also to be accepted as non-proprietary members.
8. Proprietary members were to be required to adhere to rules for restriction and selling laid down by the Association.
9. There were to be local boards in each producing country to supervise the carrying out of the conditions of the scheme, and also advisory district committees.

III. The Straits Times Scheme⁴

A. The objects of the scheme were:

1. To control the production of rubber by the government. It was hoped to secure the cooperation of the British and the Dutch but failing

³ *PAM Report*, 1922, pp. 12-15.

⁴ *ibid.*, pp. 12-16.

this the British rubber growing colonies and protectorates were to act by themselves.

2. To balance supply and demand by control of output and thus to raise prices to a profitable level.

B. The proposed methods to be followed were:

1. The compulsory restriction of output by allowing export only by license.
2. The restriction was to be on the basis of 50% of 1920 outputs.
3. Producers who might require financial help were to be advanced money by the government on the basis of the difference between the cost of production and the selling price. The cost of production was to be fixed on a scale to be known as emergency costs scale which was put at 30½c (Str.) per pound on half production.
4. Agents authorized by the government were to certify as to the amount to be drawn by the estates they represented, licenses to export being granted on these certificates.
5. The money to meet these advances was to be obtained by the issue of Rubber Security Bonds. The security for the bonds was to be the properties of the producing companies or individuals which would be pooled to form a common security.
6. The bonds would be issued by approved banks and guaranteed in the first instance by the local government but also by the Imperial Government.
7. The bonds were to bear interest at 7%. Borrowers were to be charged 10%, the difference of 3% to cover cost of administration.
8. Advances were only to be made on producing areas and to those whose funds were exhausted.
9. Interest and administration expenses were also to be borne in the first instance by the governments.
10. Advances were to stop when rubber rose to 35c (Str.) but restriction of exports was to be carried on until the price rose to 60c per pound.
11. The making of advances was to be in the hands of a Central Control Board nominated by H. E. the Governor, and to consist of not more than ten persons, at least half of whom were to be planters, and the chairman to be a full-time paid officer.
12. The bonds were to be a first charge on all properties, but mortgage or debenture holders were to be recognized to the extent of receiving temporarily 5% on their claims.

IV. Mr. Shelton Agar's Scheme⁴

A. The object of the scheme was:

1. To bring about automatic restriction of output by compensating those producers who would restrict, from a fund contributed to by all producers through a duty levied on all rubber exported.

⁴*ibid.*, pp. 13-18.

GOVERNMENTAL CONTROL OF CRUDE RUBBER

B. The proposed methods to be followed were:

1. To form a corporation to be controlled by
 - (a) An International Council in Europe, representative of the rubber growing industry in all countries and nominated by representative bodies; and,
 - (b) A board of directors in each rubber growing country holding complete powers. The boards were each to have a manager and secretary and the right to delegate power to an executive board.
2. The corporation was to have no cash but was to raise a fund with the concurrence and cooperation of the different governments by means of a duty of 1d. per pound on all rubber exported.
3. The corporation was to have a nominal capital of £5,500,000 to be issued to members against half of the sums which they were entitled to receive from the fund on the basis of 3d. per pound of rubber crop restricted.
4. Shares were to carry no interest but were to be payable in cash to holders plus 10% premium after five years.
5. The governments were to collect the duty and to be allowed to deduct 10% for collecting. This was to be in addition to the regular export duty or assessment.
6. The whole principle was that those producers who did not join and restrict would have to pay 1d. per pound on all exports and this sum would go to compensate those who did restrict.
7. Assuming that under the scheme producers controlling 70% of 360,000 tons restricted 50%, and 30% did not restrict the result would be

Income on 234,000 tons at 1d. per lb.		£2,184,000
Expenditure, 3d. per lb. on 126,000 tons	£3,528,000	
Plus cost of administration	25,000	
	3,553,000	

8. Since only half is paid in cash the actual payments would be £1,789,000. However, there is still the liability amounting to £1,764,000 annually plus a proportion of the premium of 10% in five years.
9. The aim was that share liability should be met by a gradual decrease in the amount of rubber restricted with a corresponding decrease in compensation and an increase in income.
10. If all producers were to restrict 50% the corporation would have to borrow £865,000 yearly.

V. Other Schemes

- A. Herr Helferich proposed to establish control syndicates in British Malaya, Netherlands East Indies and Ceylon similar to the sugar producers' control in Java. This organization assures profits to the shut-down estates as well as to the active ones.⁵

⁵ *PAM Report, 1922, pp. 12-13.*

- B. A scheme was drawn up by Messrs. David M. Figart, Edgar B. Davis, and W. B. Mahony for the establishment of the Rubber Plantations Corporation. (See p. 25.) The advantages which would be secured through such a combination of the rubber industry and American financial interests were stated to be as follows:⁶
1. An international market for securities.
 2. The formulation of policies affecting output and surplus stocks.
 3. The distribution of risks from diseases and pests, winds, floods, deterioration of trees, etc.
 4. A reduction in costs through economies of large scale management.
 5. Centralized administration of labor.
 6. Benefits to manufacturers and planters through large-scale production of a uniform product under new processes as developed.
 7. An organized campaign for extension of present uses of rubber and the stimulation of new uses.
 8. The maintenance of efficient research and statistical departments to secure accurate knowledge of progress in all phases of the industry.
 9. A stabilizing influence in the industry.
- C. W. Kellie Smith proposed to restrict the output to 50% by imposing a heavy export duty, not to exceed 10% ad valorem or 5c a pound, on all excess over 50% of the normal output.
- D. Other proposals included the establishment of Land Banks and Co-operative Agricultural Banks for Malaya. An export tax was suggested as a means of acquiring capital.⁷
- E. The total prohibition of exports for such a period as would rectify the position was suggested.
- F. The purchase and storing, or destruction, of 10,000 tons of rubber monthly was suggested.
- G. It was proposed to impose a high, but not prohibitive, duty on all exports, such duty to be raised with a rise in price in order to keep exports down.⁸

⁶ *ibid.*

⁷ *ibid.*, p. 19.

⁸ *The Trans-Pacific*, September 1921, p 44.

APPENDIX B

STEVENSON COMMITTEE REPORT¹

1. The Committee's terms of reference were:

To investigate and report upon the present rubber situation in British Colonies and Protectorates for the information of the Secretary of State for the Colonies, and to advise what remedial measures should be taken to improve the existing position.

2. The Committee have had many suggestions and much information before them, including the Reports of the Duncan Committee submitted to the Government of the Straits Settlements and Federated Malay States on January 26, 1921, and the Report, dated October 1, 1921, of the Commissions appointed by His Excellency the Governor of the Straits Settlements and High Commissioner of the Federated Malay States to enquire into and report on:

- (a) The present state of trade depression brought about in the main by the continued depression in the Rubber Industry; and
- (b) The extension of credit facilities.

3. The Committee devoted their attention in the first place to ascertaining the present state of the Rubber Industry. In the absence of complete official statistical information, the Committee carefully investigated the relevant statistics from such official and unofficial sources as were available, and have concluded that the following figures of Plantation and Wild Rubber may be taken as showing approximately the present position:

Production—The actual production of Crude Rubber in 1920 and 1921 was:

	<i>Plantation</i>	<i>Wild</i>	<i>Total</i>
1920	335,000 tons	35,000 tons	370,000 tons
1921	260,000	22,000	282,000

The normal unrestricted output of Plantation Rubber during 1922 is estimated at 380,000 tons, whilst the production of Wild Rubber is estimated at 20,000 tons, or 400,000 tons in all.

Consumption—The average annual world absorption during the years 1919-21 was 300,000 tons, viz.:

1919	330,000 tons
1920	310,000
1921	265,000

In the present state of world trade, it is not possible to estimate the consumption of Crude Rubber in 1922 at more than the foregoing

¹Phillipson, pp. 82-91.

average, viz.: 300,000 tons, but some authorities place the probable consumption as low as 260,000 tons.

Stocks—The total world stocks of Crude Rubber on January 1, 1922, are estimated at:

In consuming countries	210,000 tons
In producing countries	60,000
Afloat	40,000
	<hr/>
	310,000
	<hr/>

This estimate of the total amount of Crude Rubber in existence includes the invisible stocks in the hands of both producers and manufacturers. Necessary stocks of Crude Rubber may be estimated at the equivalent of eight months' consumption, which on the foregoing estimate for 1922 would call for 200,000 tons. On this basis the surplus stocks at January 1, 1922, amounted to 110,000 tons.

4. From these figures it appears that, in order to reduce the production of Plantation Rubber to the level of probable consumption during 1922, a restriction to at least 75% of normal production would be required. The Committee were of the opinion, however, that the depression in the Industry could not be sufficiently rapidly relieved unless a substantial inroad were made into the existing surplus stocks during 1922, and that a more drastic restriction is imperative to ensure this.
5. Of these figures, the Committee cannot fail to advise you to contemplate with grave concern the position of the Industry in British Colonies and Protectorates, unless steps are taken to reduce stocks and, further, to prevent over-production of rubber so long as the potential normal production continues to be substantially in excess of consumption. They are of opinion that consumption is not likely to overtake potential production for some years.
6. The Committee next directed their attention to the manner in which the existing surplus could be reduced and future supplies so regulated with a view to establishing an equilibrium between supply and demand, and stabilizing the Industry on a sound footing. They have examined this problem from four points of view:
 - (a) Stimulation of new and extended uses of rubber.
 - (b) Voluntary restriction.
 - (c) The laissez-faire argument.
 - (d) Government action.
7. With regard to (a), there is no doubt that much can be done in the direction of stimulating new and extended uses of rubber, but this cannot, in itself, provide an immediate solution of the problem, since much time must necessarily elapse before any new and extended uses of rubber can become sufficiently operative to bring about materially increased consumption. Further, it should be realized that improved methods of manufacturing rubber products, such as tires, undoubtedly prolong the life of the article and consequently curtail the demand for raw rubber.

8. With regard to (b), the Rubber Growers' Association, which represents about 37% of the plantation rubber-producing interests, secured the adhesion of nearly all their members to a voluntary restriction of output to 75% of normal during the period November 1, 1920, to December 31, 1921. During December last, they endeavored to secure the assent of their members to continue voluntary restriction by undertaking not to produce more rubber during the first six months of 1922 than they produced during the corresponding period of 1921, or alternatively, than 75% of their output during the corresponding period of 1920. The Council of the Association was able to secure the assent of only 55% of the producing interests represented by members of the Association, as compared with the minimum of 70% deemed necessary to make the scheme operative. Notwithstanding this, it is evident that the necessity for continuing to restrict output is appreciated by a large proportion of the members of the Association, who will, no doubt, continue this policy on an independent voluntary basis.
9. With regard to (c), the advocates of the laissez-faire policy desire to see a survival of the fittest. They rely on being themselves amongst the survivors, and disregard entirely the hardships which must fall on the many tens of thousands of shareholders in this country alone, and the many thousands of European and Asiatic owners and shareholders resident in the countries of production, if the Industry is to drift along unprofitably until the weakest have been eliminated. It must be borne in mind that even though a proportion of existing proprietors are forced to abandon their estates, the rubber trees thereon will remain a potential source of rubber and will be brought into production again by some one as soon as a margin of profit can be secured. The Committee could not, therefore, advise you to leave things in their present unsatisfactory state, unless all efforts to find a positive solution of the problem fail.
10. With regard to (d), the Committee are fully aware of the grave objections to Government interference with industry, especially when it takes the form of restricting the output of an important raw material. The objections are obvious to all and need not be set out in detail. It was only with reluctance and with a lively apprehension of the dangers which threaten both the Industry and the countries in which it is so largely carried on that the Committee agreed to consider a measure of compulsory restriction as an alternative to what seemed to be worse evils.
11. Further, the Committee desire to put on record that at the outset of their inquiry, they formed and have never departed from, the conviction that it was impossible to deal with the problem as one affecting only the British Colonies and Dependencies in which rubber is produced. They recognized from the first that no scheme of restriction, whether voluntary or compulsory, could usefully be applied in Malaya unless it was simultaneously applied in other countries in which there is production of rubber on a large scale. This conviction formed the basis of the Committee's deliberations, and, in particular, they have throughout kept in view the fact that no scheme, however excellent in itself, could properly be recommended to you for adoption unless it commended itself to the Authorities of the Dutch East

Indies, who control the only important source of Plantation Rubber outside British Colonies and Dependencies.

As indicating the relative importance of different plantation rubber-producing countries, the following approximate percentages are given:

	<i>Percentage of Total Production</i>
Malaya	57.5
Ceylon	12.5
South India and Burma	2.0
Netherlands East Indies	25.5
Other Countries	2.5

12. The Committee had numerous schemes before them involving Government action, but as several had fundamental objections it is not proposed to refer to them all in this Report. Two schemes, however, appeared to offer a practicable solution of the problem, and are briefly described below:

Scheme 1 is that suggested by the Duncan Committee in their Report of January 1921, and involves legislation prohibiting both the production and export of any quantity of rubber in excess of a prescribed percentage of that produced or exported during a specified previous period.

Scheme 2 was proposed by the Chairman, and comprises a graduated scale of export duties, varying with the percentage of standard production (i.e., output during a specified previous period) exported; a low duty being fixed on the amount exported within a permissible percentage and prohibitive duties being fixed if more than the permissible standard production be exported.

The outlines of these two schemes are as follows:

Scheme 1:

- (a) Adopts, as the standard production, the actual output of each producer during the twelve months, November 1919 to October 1920 estimated to aggregate 330,000 tons of Plantation Rubber from all producing countries;
- (b) Restricts to a percentage of the standard production, leaving a margin of production available to meet forward contracts or cases of special hardship; such percentage being fixed from time to time by notification in the Government Gazette;
- (c) Sets out draft enactment and rules to carry the scheme into effect.

Scheme 2: "Standard Production" would be the same as in Scheme 1, and the following scale of duties is proposed:

<i>Percentage of Standard Production Exported</i>	<i>Subject to Duty Per Pound over All</i>	
Over 100%	1s.	2d.
91 to 100	1	0
81 to 90	0	10
76 to 80	0	8
71 to 75	0	6
66 to 70	0	4
61 to 65	0	2
60 and under	0	1

Of these rates of duty, one penny per pound, irrespective of the price of rubber or quantity exported, would be imposed permanently in lieu of the existing ad valorem duty, but rates in excess of one penny would be temporarily imposed, say for three years. When the rubber situation improved so as to justify an increased percentage of standard production being exported, the necessary elasticity would be secured by fixing the minimum rate of one penny just below the increased percentage required; thus, if export of 70% instead of 60% could be absorbed, the duty on export of 70% and under would be fixed at one penny duty on 71% and over remaining as in the scale.

13. It will be seen that the essential differences between the two schemes are that the first prohibits output over a fixed percentage and secures no revenue to the State, whilst the second would have a tendency to restrict exports over a fixed percentage, but not directly production, would bring in a revenue to the State from duty, and should not prove difficult to administer.
14. The Committee regarded Scheme 2 as the preferable of the two and easily workable. If adopted, the percentage of standard production to be allowed during the twelve months following the introduction of the scheme should be fixed at 60%, which, with the margin to meet forward contracts or cases of special hardship by reason of the period selected for the standard, would ensure a substantial diminution of the surplus stock of Crude Rubber. Alterations in the percentage of standard production should be governed by the price of standard quality Smoked Sheet in the London market, and it was proposed that when the price for such rubber had been maintained at not less than one shilling three pence per pound, London landed terms, during the whole of three consecutive months, the percentage of production which may be exported at the minimum duty should be raised automatically by 5 for the next ensuing quarter. At the end of every quarter a similar adjustment, either upwards or downwards, in the permissible percentage exported at the minimum rate of duty would automatically take place, but the percentage would not fall below 60%.

In arriving at this formula the Committee had most prominently in view the desirability of taking no steps which would be liable to prejudice the legitimate development and expansion of the uses of rubber. A policy of restriction can only be a temporary palliative, but, in fixing the price which shall govern the alterations in the percentage of standard production exported at the minimum rate of duty, the Committee arrived at what they believed to be a figure which would ensure a satisfactory margin of profit, notwithstanding the somewhat higher cost of a restricted crop. At the same time, the manufacturers of rubber goods should be able to obtain their supplies of crude rubber at a reasonable price with much less risk of the violent fluctuations which have been such a drawback in the past, and should thus have every encouragement to develop new uses for rubber, many of which have already been suggested and are only awaiting practical exploitation on a substantial scale.

15. The minimum rate of Export Duty allowed in the scale is approximately twice the amount now payable in Ceylon and in the Federated Malay States

at the price indicated, and the Committee contemplated that increase only because the working of the scheme may involve some additional expense on the part of Government in administering it. They are of opinion that a substantial proportion of any additional revenue obtained under the scheme should be specifically set aside and applied for the direct benefit of the Plantation Rubber Industry in such ways as Scientific Research, and the development of new uses for rubber.

16. Having reached a tentative agreement to submit the two schemes, the Committee, being convinced that it was essential that any policy of restriction, if it is to be effective and not to injure one producing country to the advantage of others, must be applied simultaneously in all the chief producing countries, viz.: Malaya, Netherlands East Indies and Ceylon, considered it advisable that steps should be taken to have their schemes submitted to the proper authorities in those countries.
17. The Chairman accordingly reported the position to you towards the end of November and obtained your authority to approach the Netherlands Government, with a view to ascertaining whether they would be prepared to co-operate in the adoption of one or other of these two schemes.
18. Until the attitude of the Dutch is definitely known, the Committee are unable to carry their inquiry further, as they cannot recommend the adoption of either of the proposed schemes by only one or more British Colony or Protectorate.

In view of the present disparity between probable demand and potential production, and the large surplus stocks which exist, the immediate outlook of the Rubber Industry is a serious one, but the Committee desire to record their unanimous conviction that stabilization on a sound basis can be secured by friendly cooperation amongst the principal producing countries. So strongly do the Committee believe this to be the case that they consider the Governments concerned would be well advised actively to encourage such cooperation, and they trust that you may consider it worth while, in the light of this report, to cause further representations to be made to the Dutch Government on the subject, with a view to holding an International Conference in London of the principal interests concerned.

J. STEVENSON, *Chairman*
 STANLEY BOIS
 E. L. BROCKMAN
 E. J. BYRNE
 WM. DUNCAN
 G. GRINDLE
 H. ERIC MILLER
 EDWARD ROSLING

S. H. LEAKE, *Secretary*
 May 19, 1922

APPENDIX C

SUPPLEMENTARY REPORT OF THE STEVENSON COMMITTEE¹

1. The Committee concluded their report of June 1922 by stating that they were unable to carry their inquiry further until the attitude of the Dutch was definitely known, as they did not feel justified at that time in recommending the adoption by one or more British Colony or Protectorate of either of the proposed schemes for Government intervention in the rubber industry.

Since that report was issued, the reply of the Netherlands Government to the proposals for cooperation with His Majesty's Government in legislating to ameliorate the situation in the industry has been received.

The Netherlands Government has decided not to take at present any legislative measures to restrict the production of rubber in the Netherlands.

2. The Committee have considered the question of whether in these circumstances a policy of restrictive measures in British Colonies and Protectorates alone could be adopted to the advantage of the British rubber industry, and in this consideration they have been influenced by the following facts:
 - (a) Excessive and increasing production of rubber owing to the failure of the producers to make voluntary restriction effective with the consequent continuation of the depression in the price of rubber.
 - (b) The general demand by the leaders of the rubber industry both in London and in Malaya for restrictive measures if necessary by one or more of the British Dependencies independently of the Netherlands Government attitude.
 - (c) The Committee have had before them the latest available estimates as to the figures of the world's production and absorption of rubber in 1922, together with figures of existing stocks.
3. Notwithstanding the fact that the rate of the world's absorption of rubber for the present year shows a substantial increase on the Committee's previous figure of 300,000 tons, they have decided to base their recommendations on the figure of absorption mentioned in their previous report, in order that they may err on the safe side.
4. The Committee have closely investigated the effects of the introduction in British Colonies and Protectorates of legislation framed to bring about more stable conditions in the industry even without Government control over production in other territories.
5. Inquiries have been made as to the possibility of securing voluntary restriction of tapping on British estates situated in such other territories in association with any restrictive measures that might be taken in the territories of the British Empire; the Committee understand that the Rubber Growers' Association have obtained the assurance of cooperation in this sense from the

¹Phillipson, pp. 92-100.

majority of these estates. This support will proportionately reduce the restriction in British Territories necessary to effect a readjustment of supply to demand.

6. In view of these considerations and the predominating interest in the rubber industry held by British producers, the Committee have felt a revision of their previous attitude to be justified, and they accordingly desire to recommend that a scheme of Government intervention should be put into operation in Ceylon, the Malay States and the Straits Settlements as soon as possible.

The scheme which they recommend is practically that of Scheme 2 in their previous report, with certain amendments.

RECOMMENDATIONS

- (a) The scheme recommended adopts as the standard production the actual output of each producer during the twelve months—November 1, 1919, to October 31, 1920—amplified in accordance with the suggested Rules contained in "Appendix A."
- (b) In lieu of existing Export Duties, a minimum export duty is to be levied on that percentage of standard production which is allowed to be exported under this scheme at the minimum rate of duty. The Committee recommend that this minimum be fixed at the lowest possible rate not to exceed one penny per pound.

If a producer desires to export a quantity greater than that allowed to be exported at the minimum rate of duty, he shall pay an export duty on his total export during that period of twelve months on the following scale:

<i>Percentage of Standard Production Exported</i>	<i>Duty Per Pound over All</i>	
	<i>%</i>	<i>s. d.</i>
100	1	0
Over 95 to 100	0	11
Over 90 to 95	0	10
Over 85 to 90	0	9
Over 80 to 85	0	8
Over 75 to 80	0	7
Over 70 to 75	0	6
Over 65 to 70	0	5
Over 60 to 65	0	4

At the initiation of the scheme the percentage exportable at the minimum rate is to be 60.

When the rubber situation improves so as to justify allowing an increased percentage of standard production to be exported at the minimum rate of duty the minimum would be substituted in its appropriate place in the scale.

- (c) Alterations in the percentage of standard production would be governed by the price of standard quality smoked sheet in the London market, and it is proposed that, when the average price for such rubber during three consecutive months has been maintained at not less than one shilling and

GOVERNMENTAL CONTROL OF CRUDE RUBBER

three pence per pound, London landed terms, the percentage of production which may be exported at the minimum duty would be raised automatically by 5 for the next ensuing quarter. In the event of such average price being maintained at not less than one shilling and six pence per pound, London landed terms, during the whole of three consecutive months, the percentage of production which may be exported at the minimum duty would be raised automatically by 10 for the next ensuing quarter.

- (d) Furthermore, in order that the operation of the scheme may secure the desired result, even though for reasons at present unforeseen 60% of standard production should prove to be too high, the Committee recommend that if during the second quarter after the initiation of the scheme or in any subsequent period of three consecutive months, the price of rubber, as hereinbefore defined, has not averaged at least one shilling per pound, the percentage of standard production that may be exported at the minimum duty shall be reduced to 55, and if that reduction is not effective in raising the average price over the following three months to one shilling and three pence then it shall be reduced to 50 at the end of the three months, and so on by reductions of 5% at the end of each three months until that average price is secured.

Once the percentage has been lowered it would not be increased except on the basis of a price of one shilling and three pence as aforementioned. If during any quarter when the percentage of standard production that may be exported at the minimum duty is for the time being fixed at not under 65% and the price during that quarter has not averaged at least one shilling and three pence per pound, the percentage for the ensuing quarter would be reduced by 5.

- (e) The application of the scheme in their several territories would rest with the local Governments concerned.
- (f) The Committee recommend that an Advisory Committee be appointed in London for the purposes of coordinating the operation of the scheme in Ceylon, Malaya and such other territories as may be involved. They suggest that this Committee should consist of official and non-official members, whose duty would be to advise the Secretary of State on all matters referred to it in connection with the operation of the policy now recommended, and that it should be charged with the responsibility of advising him as to the alterations in the rate of minimum duty required under the scheme.
- (g) The Committee recommend that the Governments of the territories concerned should set up Committees on which there should be representatives of the industry to deal with cases for special consideration in regard to local application of the scheme, and the Committee annex to this Report rules that would require to be observed by these local Committees in the administration of the scheme.
- (h) The Committee cannot conclude this Report without observing that, apart from the financial relief that may be expected to accrue to all rubber producers from the scheme the discouragement it affords to more drastic

tapping, cannot but benefit the estates of those managements who are voluntarily or compulsorily associated with the scheme and leave them ultimately in a stronger position than the estates whose trees have been subjected to tapping on an excessive scale.

J. STEVENSON
 STANLEY BOIS
 E. L. BROCKMAN
 E. J. BYRNE
 WM. DUNCAN
 G. GRINDLE
 H. ERIC MILLER
 EDWARD ROSLING

G. E. J. GENT, *Secretary*
 October 2, 1922

RULES FOR THE GUIDANCE OF COMMITTEES

In issuing certificates of standard production—

1. "Standard production" shall be the quantity of dry rubber produced from any holding during the period from November 1, 1919, to October 31, 1920, provided that if the owner of any holding is unable to declare the output from his holding during that period in the absence of proper records, or if he proves to the satisfaction of the Committee that the output from his holding during that period was abnormal for any of the causes referred to in these rules, the Committee shall certify some other quantity as the standard production for such holding, in accordance with the rules as set out hereunder.
2. If any owner is unable to declare the quantity of rubber produced from his holding during such period, the Committee shall assess the amount to be deemed to be the standard production for that holding, but the quantities so assessed shall not exceed the quantity attained by multiplying the number of acres planted with rubber of each by the output per acre allotted for trees of each age in accordance with the following table:

	<i>Maximum Output for Twelve Months</i>
Under five years	Nil
Between five and six years	120 pounds
Between six and seven years	180
Between seven and eight years	240
Eight years and over	320

3. If any owner claims that a portion of his holding is planted with trees which were not tapped prior to November 1, 1920, he shall be allowed as standard production in addition to his output from November 1, 1919, to October 31, 1920, an amount calculated according to the table in Rule 2 above.
4. If any owner claims that during the period November 1, 1919, to October 31, 1920, his output was less than his normal output owing to—
 - (a) Lack of labor;
 - (b) Abnormal ill-health of his labor forces;

GOVERNMENTAL CONTROL OF CRUDE RUBBER

- (c) Disease of his trees, from which they have since recovered;
- (d) Resting of the trees; or
- (e) Any other reasonable cause;

such addition shall be made to his actual output from November 1, 1919, to October 31, 1920, for purposes of certification as would in the opinion of the Committee, equal the loss of output sustained thereby, but in no such case shall the total output for the holding exceed the quantity to which he would have been entitled if he had applied under Rule 2 hereof.

5. If any owner can prove to the satisfaction of the Committee that prior to the commencement of the enactment he has entered into bona fide forward contracts for the sale and delivery of a quantity of rubber in excess of the amount of his normal "standard production" as arrived at under these Rules, diminished by the percentage of restriction for the time being in force, and that either—
 - (a) Such contract specifies that the rubber to be delivered under the contract is rubber from his holding only; or
 - (b) He is unable to contract on the market to buy in the excess contracted for over the quantity he would be allowed to produce at a price not greater than the price at which he has sold, the Committee may allow him as standard production such quantity as when diminished by the percentage of restriction for the time being in force would allow him to produce a sufficient quantity to cover his contracts, provided that certificates issued under this Rule may be revised by the Committee at any time when such contracts expire or the percentage of restriction for the time being in force is altered.
6. Certificates of "standard production" when issued may not be varied within twelve months of the date of such issue, but on the expiration of such period of twelve months or any subsequent period of twelve months any owner may apply for revision of the quantity for which his holding has been assessed on the grounds that further areas have since the issue of the certificate attained the age of five years and are in a condition to tap. In such case the Committee shall increase the quantity assessed in accordance with the Rules laid down herein.
7. If any owner states on his application form that he desires to be assessed to any quantity other than his actual output from the period of November 1, 1919, to October 31, 1920, and gives his reasons for this request, the Committee shall, before issuing any certificate, notify such owner of the quantity at which the committee propose to assess him, and inform him that in the event of his objecting to such assessment he must state his case personally or by his representative or by letter at a specified time and place.

APPENDIX D

LETTER OF SECRETARY HOOVER TO SENATOR CAPPER, MARCH 6, 1924

Dear Mr. Senator:

In accord with your request I give the following summary of our conclusions as to combinations in our import trade.

The last Congress made a special appropriation to this department to provide for investigation of imported raw materials essential to American industry which are under control of foreign combinations in restraint of price or distribution. While the reports upon this topic have not all been completed they will be ready at an early date and abundant material is in hand to prove unquestionably that foreign monopolies or combinations are potentially or actually in control of prices and distribution of the following commodities:

Sisal for binding twine is controlled through a combination of producers reinforced by legislative action of the Yucatan Government.

Nitrates and iodine are controlled through a British selling agency and reinforced by export duties in Chili.

Potash is controlled by combinations of German producers.

Crude rubber and gutta percha are controlled by partly legislative and partly voluntary combination of producers in the British and Dutch Colonies.

Quinine is controlled by combination of Dutch producers.

Tin is controlled by combination of British producers.

Mercury is controlled by common selling agency of Spain and Austrian mines.

Coffee is controlled by the Government of Brazil.

Quebracho (for tanning purposes) is controlled by combination of producers and foreign manufacturers.

You will note the importance of most of these commodities to the farmer.

The value of our total imports of the above in 1923 exceeded \$525,000,000 and prices are undoubtedly much higher than would otherwise be the case. There are several others of partial control or of minor order aggregating altogether large sums.

The prices of these commodities enter into the cost of living of all our people. An instance of the special importance to the farmer lies in sisal for binder twine, where although present prices are possibly not extortionate, yet a few years ago they were deliberately advanced 300%, and during the period fully \$100,000,000 of excess prices was taken from our producers, which apparently did not even reach the Mexican farmer. Such combinations cannot, of course, be effectively reached under the Sherman Act, as they are or can be seated outside of our jurisdiction.

This department has given a great deal of thought to measures which can be taken in protection of the American consumer. Indirect security can be obtained in some instances by the stimulation of production in other parts of the world

free from these controls and in other cases by the encouragement of synthetic manufacture in our own borders. Yet these measures at best require much time before they could afford protection. They will not apply in all cases. We shall be able at a later date to offer some recommendations in these directions.

It is our conclusion that some relief can be reached legislatively. Our exporters and manufacturers are permitted by the Webb-Pomerene Act to undertake joint selling agencies abroad under certain restrictions. If by an extension of this Act our consumers were allowed to set up common purchasing agencies for these imported raw materials where there is positive combination in control, I am confident that our people could hold their own in their dealings with such combinations. The danger of such common purchasing agencies attempting to make improper prices against our buying public could be met by provision in the Act to include proper assurance that all consumers who wished to participate would be allowed to act through such common buying agencies with full equality of treatment, that such agencies would not be conducted for profit in themselves, and any other necessary restrictions. You already have before you a legislative suggestion of this order which I believe can be simplified into amendments of the Webb-Pomerene Act.

There are comparatively limited numbers of primary purchasers of each of these raw materials and common purchasing agencies would not be impossible of organization. There is active competition amongst our manufacturers in the sale of goods in the production of which these raw materials are used. It is my belief that this competition would naturally result in passing along to the public economies that can be made in the purchase of these materials but in any event provision could be made in the amendment to the Act which could adequately protect our own public against any restraint of our domestic trade by such common buying agencies.

I am confident that a unity of buyers is in the long run stronger than any combination of producers because the producer usually has the disadvantage of being compelled to maintain continuous production whereas the consumer can so organize his business if necessary as to become an intermittent purchaser.

It is my belief that joint action of our consumers dealing single handed with such combinations could, in general cases at least, greatly moderate the present cost of these supplies. We seek nothing further than protection against wrongful treatment and our consumers are fully alive to the necessity for proper profits to foreign producers and thus the assurance of full supplies.

I may add that the investigations which have been in course have already given some relief because apparently some of those combinations have realized that immoderate action on their part would stimulate counter activities on ours.

The matter is one of urgent importance and should have early relief.

Yours faithfully,

HERBERT HOOVER
Secretary of Commerce

APPENDIX E

ADDRESS BY SECRETARY HOOVER BEFORE THE CHAMBER OF COMMERCE
ERIE, PA., OCTOBER 31, 1925

I wish upon this occasion to discuss a matter of considerable gravity in our foreign trade.

Foreign controls of production and price have been created in a number of important raw materials which, because of our inability to produce, we must depend upon purchasing abroad. The combinations to which I refer have been set up either directly by legislation of foreign governments or indirectly by government patronage. This sort of control of production and price exists today in coffee, silk, nitrates, potash, rubber, quinine, iodine, tin, sisal, some dye-stuffs, quick-silver, certain tanning extracts, and some other things. To demonstrate that this is not an inconsequential matter requires only the recitation of the fact that we expend annually about \$800,000,000 for imports now subject to such controls. They amount practically to trade war, and the time has arrived when we require either disarmament or defense.

Three years ago I pointed out this incipient growth and the many dangers which lay in such activities, both to the consumer and producer and above all from the larger view of world interest and progress. At that time my statement was discounted by some for we were assured by their sponsors that the purpose of these controls was merely to temporarily stabilize industry and trade over the disturbed post-war period, and that the consumer would actually benefit as well as the producer.

But these combinations have continued to increase in numbers and some of them have demonstrated all the dangers which I then anticipated and more. The time has arrived when a full, frank discussion of the whole subject is desirable. For true and effective judgment as to the course of action that should be taken by nations can only be formed by a hammering of the facts upon the anvil of debate.

At the outset I wish to emphasize that in this discussion I am not criticizing any foreign government or its nationals. I have perhaps had a unique post of observation and I therefore have infinite sympathy for the economic difficulties of all governments during these years. But the world is rapidly gaining stability and measures which may have been necessary to statesmen distraught with the problems of readjustment can now be reconsidered.

Moreover, it could also be said that the buyer of a commodity has an inalienable right to argue at the price even when his friends are the sellers. He has a right to consider all these things from his own point of view without any implication of unfriendliness or criticism for there are two parties in these matters—buyers and sellers, not one party. But far above this, if a man sees his friends pursuing courses which can only lead to mutual disaster to themselves or the

community in which we all live he is a poor friend who does not say so and say it frankly. And it is equally true among nations.

The economic distortion during the war made controls necessary on a hundred commodities in order to prevent hoarding and profiteering and to stimulate production by guaranteed prices. These controls were intended solely to stimulate production, not to restrict it, and were dissolved at the end of the war, while those now current are, with a few exceptions, the creation of the last few years and for the purpose of increasing price levels through limiting production. They plainly revolve around the monopoly possible over certain raw materials which temporarily or permanently are dominantly produced within the confines of a single nation, and upon which the fifty other nations of the world are dependent for their standards of living and comfort. In no case does any one country possess the total supply of any one of these commodities, but in many cases they possess sufficient that when mobilized they can control the price.

Various legal forms of these price controls have been devised, but in all cases they depend upon governmental action of some kind and their method is either to restrict exports or to establish a unity in selling against the competition of the buyers. I believe in all cases these controls make the same prices to their own citizens as they do to foreigners, but likewise in all these cases their home consumption is but a small percentage of their total production.

These international monopolies have a very wide difference from governmentally created domestic monopolies. In all modern governments where we do create a monopoly we likewise regulate its prices and profits in order to protect the consumer. In these international monopolies the consumer has no voice at all.

We, as a government, have set up no such controls and, through the Sherman Act, we prevent our citizens from doing it. The so-called Webb-Pomerene Act is not for this purpose. We have clung tenaciously to the belief that economic progress must depend upon the driving force of competition. The only thing of the nature that has ever been seriously proposed in our country was certain measures of agricultural relief which in themselves did not partake of this character, for they contained the benevolent aspect of proposing to fix a higher price to our home consumers than to foreigners and to thus bless the foreigner with cheaper food.

The problem that faces the world, and possibly the more serious problem, is not alone the commodities that are now controlled but the spread of these ideas. There are many other raw materials whose sources are so situated that they could also be controlled by action of a single government. The price of wool could be controlled by governmental action within the British Empire. The prices of oil, cotton and copper could be controlled for many years by similar governmental action in the United States. Tea and jute could be controlled by India; antimony and tungsten by China; nickel and asbestos by Canada.

But an even greater danger lies in the fact that if we conceive a spread of these ideas largely into international commerce then it is perfectly practicable under government patronage for controls to be established by cooperation of producers in several countries and thus steel, vegetable oils, and a long list of other commodities can be brought quickly into this menacing vision.

Moreover, if these combinations now extant prove successful over even lim-

ited periods of years the tendencies of all producers when in difficulty will be to press their governments to try these devices for even temporary relief. No government can sit still and deny to its own citizens these privileges while they suffer from such action of others.

Unless a halt is called we are likely to see these ideas become established as a regular phenomenon in international commerce.

Any inspection of the list of the present controlled commodities will indicate that few of them actually originate in the great industrial nations, that is, the United States, Great Britain, Germany, France, Italy, Belgium, Czechoslovakia, Austria, Holland, etc. It is true that some of them have been organized in their colonies and some of them participated in by their citizens.

We are, of course, a large producing as well as consuming nation in raw materials, and we have it within our powers to retaliate, so that we could take care of ourselves if the world is to develop this form of international relation. The industrial countries of Europe, however, have little of such resources and the growth of these methods can only lead to further retardation of their recovery. And if we, the strongest of all nations, enter upon such programs of creating combinations we will have given strength to forces of evil in the commercial world which generations could not remedy.

An easy-going and tolerant world, anxious above all things to keep down international friction might let these controls in international trade continue—objectionable as they are—if their conduct in every case had been merely to secure a reasonable profit to the producer. But some of them have advanced prices far beyond this point and again demonstrate that inherent quality of all combinations in restraint of trade—that no unregulated monopoly is ever content with the reasonable but always seeks to justify the unreasonable on some grounds or other.

Under a special direction from Congress the Department of Commerce has made an exhaustive investigation of these combinations, and I may cite two or three as showing this particular tendency. The uniform expression of the managers of the rubber control in the East Indies up to eight months ago was that the industry sought only from 30c to 35c per pound for their product, and our investigation showed they could earn about 25% on the capital invested when rubber brings that price. It is today over \$1.00 per pound and production is still being restricted. It is said that previous losses of the growers must be recouped. The same might be said by our wheat, cotton, oil, and copper producers. Likewise the assertion of the coffee industry over years since the war was that stabilization was sought only at roughly 12c per pound. It has recently been lifted as high as 32c and is today 22c, with a great surplus of supplies in its possession.

That this difference between "reasonable" and "high" prices is not trivial in its monetary implication to our consumers, is perhaps indicated by the fact that this margin alone over the whole list is today costing us upwards of \$300,000,000 per annum. And it is not our people who are alone concerned but every other consuming nation in the world.

From an economic point of view, we have two parties to consider in all interchange—the consumer and the producer. High prices stifle consumption and

when we stifle consumption we do two things: reduce the standards of living of the consumer and in the long run tend to reduce the business of the producer. The consumer at once seeks every device to get larger use out of a smaller quantity, and he turns, consciously or unconsciously, to the use of substitutes. The demand for substitutes stimulates every genius to discover and exploit them. I am not talking of adulteration. For instance, the coffee drinker abstracts the last drop from his beans and turns to tea and cocoa. We thus reduced our consumption of coffee by 20% during the past year. The rubber user patches his automobile tires and recovers old rubber to use it again. Every chemical laboratory starts on a search for better methods of rubber reclamation. The tin user turns to galvanized iron and glass containers. The farmer demands of his government that it shall produce synthetic nitrates. On the production side the whole world goes searching for other sources of supply outside the controlling country. High profits stimulate production wherever possible in other quarters.

If all these forces be carried to the extreme, the combined result may ultimately bring some of these controls in a crash around the entire industry—producers, manufacturing consumers, and distributors alike.

There is here a danger often overlooked, for the distributor and manufacturing consumer of these commodities is compelled to carry large stocks of raw materials in transit, in factory reserve, and in process of manufacture. The manufacturer's commitments to his trade for forward orders compel him to bear a large loss during the rise in prices and if prices break he must offer his goods based upon price of raw materials of the day. Thus the ablest managed manufacturing or distributing business is in constant jeopardy from forces they cannot themselves control.

The very erection of these controls is an invitation to the entire consuming world to fight militantly for its existence. The length of time that any particular control can last against these forces no doubt depends upon the degree of need for any particular commodity and the other possible sources, and the possibility of substitutes. These forces can probably break the control of any agricultural product in a few years, for many alternative sources of production exist. Advance in synthetic production of some chemicals will perhaps remedy these combinations. Others might be more difficult to meet. However, these pressures operate very slowly and in the meantime I assume that these facts being well known to the controlling nations they calculate on reaping such a harvest as will compensate them for the ultimate possible demoralization of their producing industry.

From a political point of view (and I am not speaking of domestic politics but of international relations) these actions and their reactions are alive with danger. As long as our international commerce is based upon the higgling of producers and merchants in a market whose floor is the free flow of supply and demand, their sorrows and exultations do not affect national emotion. It may be that if these controls had never existed prices might temporarily go as high or higher, but in such an event there would be the quick response of increased production with its relief to price, and in any event there would be no national feeling over such natural courses of trade. Instead of this we see today continued restriction and above all the arousal of national feeling of injury.

The moment that a government directly or indirectly fosters or establishes these combinations then that government has taken the responsibility for the prices. Whether these prices be reasonable or high, the populations of the consuming countries direct their attention upon the selling government and the matter becomes one of national emotion among all consumers. These peoples at once appeal to their government for action that it should use its great powers for their protection. Every day for the past year our government departments have had to deal with exactly this thing. And at once we have higgling of merchants lifted to the plane of international relations, with all of its spawn of criticism and hate.

Our foreign offices will thus sooner or later become the bargainers in the market and the negotiations of each of them are backed by a fine lot of rooters for the home team. In the long run it will not even have that softening goodwill of sportsmanship for the fixing of prices cannot be based on altruism. The world will never go to war over the price of anything. But these actions can set up great malignant currents of international illwill.

The question naturally arises as to what we, a nation great both as a consumer and a producer who have so far resolutely refused either to set up such combinations in our products or to allow our citizens to create them, should do in these circumstances. We cannot allow this situation to go unheeded. There are several alternative courses of action.

We could resolutely set ourselves to reduce consumption in every article that is so controlled. We could stimulate the use and manufacture of substitutes. We could induce our citizens to go abroad to other regions and establish rival production. We could prohibit the extension of credit to countries where such controls are maintained. We could request the rest of the consuming world to join with us in these campaigns. It might be that such activities would bring about an everlasting lesson to the whole world. But this is trade war and we want to live in trade peace.

Alternatively we could say to ourselves that we will revise the whole of our traditional national policy of competition as the base of production and that we will legislate and encourage the establishment of these combinations for our own producers with the view of getting back compensating amounts from helpless consumer nations. Our resources are so varied and our people so ingenious that we could probably reap a rich harvest in the final balance in holding up the rest of the world.

Alternatively again, we might say to ourselves that these combinations are inevitable, and they will be continuing phenomena; that therefore we, being a great consumer, will set up defenses by authorizing our merchants and manufacturers to buy these commodities through a single agent and thus meet the issue of a single seller with a single buyer. For the organized consumer has ever proven stronger than the producer and we could win out in such a battle. No doubt such a course implies that we must set up distasteful regulations that would provide for protection of our consumer as against this single middleman.

Another alternative which has been suggested is that the consumer nations of the world should secure by international agreements the same rights which

they would secure in a domestic monopoly; that prices should be regulated under circumstances that the consumer has an equal voice with the producer.

But I have no liking for any actions of this sort, for they are either destructive of the one hope of the world—progressive production—or they are a recognition of the permanent establishment of these policies in the future international commerce. They contemplate international trade in an atmosphere of contention and dispute instead of peaceful cooperation. The problem should be met on the ground of what in the long run will produce goodwill and prosperity to the entire world, for no single nation can disassociate its prosperity from the prosperity and goodwill of all of them.

The world is emerging from the chaos of the war, and these governmental measures are no longer justifiable, since the producers of the world may look forward to more stable times. We are also at the point where the whole consuming world is being driven toward destructive courses to protect itself from exploitation by these controls. Therefore the time has come when a solution of this problem is both urgent and more feasible.

I am convinced that the sound solution does not lie in any of the alternatives I have outlined; they are all in the nature of last resorts. They recognize trade war. I believe the solution does lie in the willingness of statesmen throughout the world to recognize the consequences of government controlled production and price, and to meet the issue in the only way it should be met, that is, by abandonment of all such governmental action.

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GOVERNMENTAL CONTROL
OF CRUDE RUBBER

THE STEVENSON PLAN

A DISSERTATION

PRESENTED TO THE

FACULTY OF PRINCETON UNIVERSITY
IN CANDIDACY FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

BY

CHARLES R. WHITTLESEY

*Assistant Professor of Economics
in Princeton University*

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FOREWORD

THE following study is the second of a series to be published under the auspices of the International Finance Section of the Department of Economics and Social Institutions in Princeton University. This section was established as a memorial to the late James Theodore Walker, Princeton 1927, with funds largely provided by members of Mr. Walker's family. The function of the Section is research, advanced teaching, and public service in the field of international finance.

While governmental interference with the supply of raw materials is not a new phenomenon, the numerous attempts that have been made within recent years, both in the national and the international sphere, to establish governmental control of raw materials have constituted this one of the outstanding economic problems of the day. A comprehensive account of one of the most famous of such controls, the Stevenson Plan for restricting the export of rubber from the British possessions in the middle east, is here made available for the first time. In addition, Professor Whittlesey offers an analysis of the problems arising from governmental control of raw materials that should prove of interest and value to economists and students of public and international affairs generally.

E. W. KEMMERER

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PREFACE

THE outstanding importance of rubber in present-day economic life is too apparent to require comment. The significance of attempts to set up governmental regulation of the supply of basic raw materials is scarcely less obvious. It follows from these two premises that the experiment of the British in restricting the export of crude rubber is of major importance in the history of economic affairs.

Conditions seemed to make this an ideal case for testing the policy of governmental control of raw materials. The industry was notable for an inelastic demand coupled with a marked concentration of supply, the two primary conditions of a successful monopoly. The results of the control during the first few years exceeded the expectations of its most ardent proponents. Prosperity returned to the planting industry and rubber growers, who had been somewhat sceptical of the measures, became supremely confident of their efficacy. The spectacular price movements that developed during the third year of restriction aroused strenuous opposition to the legislation in the United States. In orthodox fashion we countered with a more or less stormy congressional investigation. The government of the United States became involved in somewhat heated but virtually fruitless negotiations with Great Britain. Active counter-measures in which President Hoover, then Secretary of Commerce, figured prominently proved decidedly significant. The apparent effectiveness of restriction gradually declined and in 1928 the Stevenson Plan came to an inglorious end.

I have attempted to give, in the following pages, a comprehensive picture of the British rubber control. The procedure followed was to analyze the conditions that led to governmental control in the industry, to examine the plan itself with its various modifications, and to assess the effects of restriction upon producing countries, upon the principal consuming country, and upon the principal investing country. In the two concluding chapters I have treated the issues raised by the Stevenson Act, many of which are pertinent to the problem of governmental control generally, and I have endeavored to give a perspective view of rubber restriction in particular.

The sources drawn upon are sufficiently indicated in the appended bibliography. The value of publications issued by the governments of British Malaya and the Netherlands East Indies deserves, however, particular mention. Without attempting to express my appreciation for all the courtesy and assistance I have received, it is only fitting that I should acknowledge my

indebtedness to Professor Frank D. Graham of Princeton University for advice and suggestions during the writing of the book; to Mr. Everett G. Holt, formerly chief of the Rubber Division of the Department of Commerce, who placed the material of his division at my disposal and later read and criticized the manuscript; to Dr. Benjamin B. Wallace, formerly of the United States Tariff Commission, and Professors James G. Smith and Frank Whitson Fetter of Princeton University, all of whom read and criticized the manuscript; and to others in the Department of Commerce, the Library of Congress, the Department of State, and among rubber manufacturers who aided in the collection of material. I am, finally, indebted to Miss Mabel S. Lewis, research assistant in the International Finance Section at Princeton University, for the preparation of the index, and to my wife for aid in the correction of proof.

C. R. W.

Princeton, New Jersey
December 10, 1930.

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