

INTERNATIONAL CARTELS IN MODERN INDUSTRY

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CHAPTER I

General Considerations.

It is a somewhat disquieting characteristic of our generation that any international development taking place slightly under the surface of public affairs does not receive the careful study that it deserves. There is a tendency to forget that the effects of a movement, whether political or economic, may be all the more potent for being underground. This has been particularly true in the case of international industrial cartels. Aided by a dormant public feeling, so lethargic in fact as to be practically non-existent, this phenomenon has been developing and spreading with the crumbling of certain antiquated economic ideas until it now resembles a comprehensive fabric stretching out, not only over Europe, but over the entire civilized world. The effects of the movement have become entirely commensurate with its size, reacting upon all the fields of economic intercourse from the individual consumer in his daily life to the complex of interwoven political and economic factors that go to determine the direction of civilized life itself.

In view of such a growth it is difficult to explain the present day attitude towards international cartels, which is the more striking in view of the modern enthusiasm for economic planning on the one hand, and the far reaching agreement that exists as to the desirability of an internationalization of industry on the other. The only answer to this apparent paradox seems to lie in the lamentable lack

of adequate information upon the subject and secondly, in the peculiar emphasis that characterizes the little information that is available for general use. It is timely, therefore, that studies of international cartels be undertaken and that new interpretations and viewpoints be raised deductively upon as large a factual basis as is available from an empirical study of the phenomenon as it existed historically and as it exists to-day. Only through such studies may an understanding of the subject, or at least a recognition of its importance, become universal, and only through the latter will economic theory be enabled to establish the bounds beyond which economic practice may not go, and not, as in the past, be forced to follow and attempt to explain, the various shapes that industrial organizations have assumed without a theoretically sound basis for so doing.

Differing from previous studies of international industrial cartels, it will be the aim of this analysis to subordinate lengthy descriptions of the various types, classifications and organizations of international cartels, to an economic interpretation from the viewpoint of the present economic system and its probable future development. It will be assumed that many of the problems that arose as a result of the world economic depression are more or less permanent under the existing order. Desirable though more efficient productive capacity is as the means to normal progress, it will be considered secondary to the special defects which prevent existing capacity from being utilized; that is, to defects in the distributive system. The welfare of the producer will be considered secondary to the welfare of the consumer

insofar as it is compatible with normal economic progress. Finally, and what is of most importance, international cartels will be viewed in the light that one of the valuable though costly lessons taught by the prosperity era of 1924-1929 and the subsequent depression is the recognition that a directing and regulating force in the economic course is inevitable and that economic life to-day cannot be left entirely to its own volition.

Definition.

Insofar as definitions indicate the meaning but not the ultimate nature of their subject, a substantial agreement may be said to exist among most modern authorities as to what actually constitutes an international cartel. Differences undoubtedly exist but they are rather of expression than of meaning. Thus it is possible to state that an international industrial cartel is a voluntary (rarely compulsory by law) terminable agreement or understanding between enterprises engaged in the same line of business in two or more countries which, while conserving their independence, agree to follow certain measures in common for the purpose of increasing the profits of each member of the agreement. A definition such as this, to convey an adequate concept of the true nature of its subject must be further examined and a few of its more important component elements and controversial points brought to light and elaborated.

Besides the preservation of the autonomy of its members in the new federation, it is seen that international cartels are characterized by the agreements being concluded for a definite (usually two

to five) year period. Dr. Plummer does not regard this duration of the cartel to be one of its distinguishing characteristics, stating in support of his argument that "the proposed or intended duration of the cartel may differ widely from the actual duration of it." ¹. In thus stating his case however Dr. Plummer seems to entirely miss the heart of the question. It is not the "actual duration" of the cartel that is of importance, but its "intended duration", the fact that the agreement must come up before the members for periodical renewal. At that time they are at liberty either to renew the mutual contract, or launch out upon their own. Should they feel that the sacrifice of liberty has not been offset by the benefits of cooperation, they may refuse to enter upon a new agreement. The stimulus to technical improvement on the part of each member that this potential withdrawal affords, is self evident but will be discussed at greater length when the effect of international cartels upon the various elements of the economic structure is under consideration. At any rate, both from its inclusion in every cartel agreement whether national or international, and from its undoubted importance in practice, it seems difficult not to conclude that the terminable element is a definite characteristic of all international cartels.

It was rather loosely stated in our definition that the members of an international cartel are "enterprises engaged in the same line of business in two or more countries." For an adequate concept it would be well to elaborate the term "enterprises" to include

¹. Plummer, A. - International Combines in Modern Industry - p. 15.

national cartels and the more integrated combines and trusts, as well as independent business units. This would show clearly that international cartels may be of several distinct kinds, that is terminable agreements between two or more national cartels, two or more national trusts, or between an independent unit on one side, and a cartel or trust on the other. It is also worthy of note that an international cartel may be formed between two or more international trusts, a relation which lacks permanence but which is of growing importance due to its natural emergence from the colossal size of most modern industrial organizations.

Regarding the independent nature of cartel membership, an analogy might profitably be drawn from the science of government. An international cartel is essentially democratic as opposed to an aristocratic form. It is a federation comparable to the government of the British Empire as opposed to the unitary government of England itself. To change the metaphor, the controlling force in all international cartels originates on the circumference of an imaginary wheel rather than on its hub. Remaining competitors in the strict sense of the term, the members lose no real degree of independence by becoming affiliated with the agreement. In fact it is only occasionally, and then merely for the sake of convenience that an international cartel ever has a legal entity of its own.

The Monopoly Dispute.

Probably one of the most disputed questions concerning cartels is that of their allegedly monopolistic character. Although the whole question is largely clouded by conflicting ideas as to

what is to be understood by monopoly, it is essential that some of the more prominent issues be cleared up before an understanding of the true nature of cartels can be reached. At this point it will be the aim merely to discuss from a new point of view what appear to be the most important theoretical aspects of the question. The empirical study which is necessary to substantiate the results obtained will, for the most part, be deferred to a later chapter which the general subject of prices is under consideration.

It was stated in our definition that the aim of all cartels was to increase the profit accruing to each member of the agreement. This dispenses completely with the idea that the end pursued by all cartels is monopoly per se, and leaves the question as to whether the means used to attain such a goal can be classed as monopolistic. There can be no question that the principal method employed by cartels is restriction of competition, and thus the question resolves itself into whether restriction of competition can be classed among the tendencies leading towards monopoly. At first sight a positive answer to such a question would appear to be almost a truism. In fact Dr. Piotrowski in his searching and exhaustive analysis treats it as such¹ and on his statement that "the natural consequence of restriction of competition or elimination of competition is a monopoly of the market"² bases the logical corollary that international cartels must therefore, of necessity, represent "a relative qualified

1. Piotrowski, R. - Cartels and Trusts - pp. 46-47. "The sole essential trait of every cartel is this immediate purpose, restriction of competition which monopolizes the market."

2. Ibid., p. 14.

monopoly." 1. The logic of this reasoning is unassailable but when further consideration is given to the premise upon which it is based the truth of the relation is seen to centre about the use of the term monopoly.

In the first place, if the term is to be continued in economic usage and especially in connection with international cartels, its exact meaning must be more clearly defined than it has been in the past. No branch of economic science reveals the necessity for this more clearly than the one under investigation. The ease with which the foremost protagonists on either side of the question² can be reconciled when their mental concepts are substituted for their printed words shows clearly that the origin of the conflict is not to be found in any essential divergence of opinion over the essence of international cartels but over that of monopoly. A brief illustration will suffice.

Dr. Burn, the latest authority definitely to take a stand on the question considers the aim of all cartels to be "a higher degree of adjustment between production and consumption" 3. than existed under competitive conditions. To secure this end, cartels, in his opinion, exercise more the character of a regulatory factor in the market than that of a monopolistic association. An examination of the many pages that Dr. Piotrowski devotes to the

1. Piotrowski, R., op. cit., p. 35.

2. Dr. Piotrowski writing in 1933 on the positive side, and Dr. Burn a year later, on the negative.

3. Burn, Bruno - Codes, Cartels, National Planning - p. 155.

question however, leads to the conclusion that this "regulatory influence" is synonymous with what he would term a partial monopoly "relative to the restriction of the competition."¹ The conflict is thus seen to be one of words only, and as such is worthless as a means of furthering real economic knowledge. Its importance lies in pointing out the necessity for a thorough revision and narrowing of the definition that modern usage attributes to monopoly, or the introduction of a new concept altogether to co-exist with monopoly on the one side and competition on the other. In view of the fact that any new definition superimposed upon an old term lends itself only too readily to confusion, the second alternative will be the end in view during the following analysis.

The modern content of monopoly is generally recognized to consist of any unified control sufficient to hold competitors well in check.² From the viewpoint of the present industrial economic organization and the evil savour usually associated with monopoly, this definition is certainly misleading in that it fails to take into account the important fact that monopoly is a relative term. Interpreted with a view to reality only, this means that the term should convey to the economist a distinct shade of meaning for each period of economic growth and for particular phases of production within each period. To illustrate, a monopoly in relation to free competition

1. Piotrowski, op. cit., p. 34.

2. Ibid., p. 58. - Dr. Liefmann does not seem to express the general concept of monopoly when he writes "monopoly as relevant to discussion of cartels is a condition in which a majority of the buyers have to deal with an organized group of sellers." - Encyclopaedia of the Social Sciences - III, 234.

should not convey the same meaning, as a monopoly in a period, characterized, as is the present, by what we might call "competing monopolies." Likewise, a monopoly existing in industries in which it is generally recognized that continued competition to-day is impossible, should not be included in the same category as a unified control in industries where continued competition is not only possible but advisable. In other words monopoly is relative to time and to place and any consideration of restriction of competition as related to monopoly must take this into account. Due to the inadequate treatment given to this phase of the question by most modern authorities¹ and also to emphasize its undoubted importance, it will be advantageous here to penetrate more deeply into this "relative nature of monopolies." Until this is done it will not be profitable to bring out the connection existing between them and international cartels.

It is possible to divide modern industrial organization into three divisions according to whether free competition is possible and conducive to the social good, where it is possible but not conducive to the social good, and finally where it is impossible. In each of these three divisions, in the past, where freedom of the market had eliminated itself with a view to unified control, economists had been accustomed to term that unified control a monopoly. They entirely ignored the evil savour that was commonly associated with the term but they were justified in so doing in view of the small number of industries embraced in the last two groups. Although there have always

1. Especially Piotrowski

existed particular industries such as the railroads in which freedom of competition both theoretically and practically was found to be impossible, and although there have also been a few industries in which freedom of competition has always degenerated into anarchic and wasteful forms of rivalry, to-day it may safely be said that their numbers have greatly increased. This has been largely due to the technological development and the vast complexity of modern market relations coupled with political nationalism and the decay of individualistic psychology on the part of business leaders in favour of an attitude of group solidarity. An added impetus has been given to the growth by the severity of the present trade depression and the tendency toward permanence which many of its particular characteristics are assuming.¹

Industrial examples to illustrate the extent of the change are not hard to find. They include all those industries which produce commodities requiring an intricate and uniform transportation mechanism before they reach the consumer, such as the banana industry, the frozen meat industry, and kindred trades. In another field they include all those industries with a vast capital outlay and facing the serious problem of surplus capacity such as shipbuilding, cotton, coal, iron and steel.² In industries such as these it is evident that the "monopoly" replacing the free competition tends to carry out the functions of a free market to a more effective and rationalized degree

1. "It is obvious that the trend towards monopolistic regulation of production and marketing has been strengthened during, and because of the depression." League of Nations World Economic Survey 1933-34 - p. 71.

2. The Economist - Feb. 2, 1935 - p. 237.

than the system it replaced. Certainly no economist could justify the state of economic anarchism that they had rapidly and repeatedly assumed under freely competitive conditions. In other words, the nature of the change was individually imperative and socially desirable. As the general connotation of the term monopoly is usually taken to include the opposite to this, i.e. voluntary action with socially undesirable results, it is evident that a new concept must be introduced to refer to this wide range of productive activity which is not conducive to economic progress under either freely competitive or monopolistic (the narrower concept) conditions.

A slightly modified form of what Dr. Pribram has called "controlled competition"¹ is a highly suitable term for this much needed concept. It will be used throughout the remainder of this study to co-exist with free competition on the one hand and monopoly proper on the other and to mean any direct or indirect interference with prices or the price structure by co-operative action on the part of employers, insofar as that interference does not result in monopoly as above defined. It will thus cover the practice of those industries which are either forced to use means to circumvent the cutthroat character of the competition into which they are inevitably driven by the present set up of the economic order or those which indirectly serve the social welfare by restricting competition to serve their own ends whether this restriction is brought about by their own or government action.

1. Pribram, K. - "Controlled Competition and the Organization of American Industry" - Quarterly Journal of Economics - May, 1935. p. 374.

With this as a basis, it should be noted, to avoid confusion, that what consists of monopoly with reference to free competition cannot be identified with monopoly in relation to the theory of regulated or controlled competition. Within the area of economic activity identified with the former any restriction of competition might have been termed a partial monopoly relative to the degree of the restriction of the competition. As related to regulated competition however, a partial monopoly in the true sense of the term can only be in force when the existing controlled competition has been still further held in check.

When this is accepted it is seen at once that there exists a wide range within which modern competition might be restricted without monopoly resulting, and likewise, the truth of Dr. Piotrowski's logical assertion¹ must be qualified to bring out the true relation that international cartels bear to monopolies. This relation exists in no simple statement on either the positive or the negative side, in spite of the views to the contrary held by all the authorities to date, but rather in a more complicated relationship that can best be clarified by taking recourse once again to the artificial but valuable three divisions of economic organization. In the case of the area served by the theory of free competition it is evident that any international cartel would be ipso facto a partial monopoly. In the second state, that of controlled competition, insofar as cartels restricted competition only to that flexible point where it had not been entirely removed, but raised from what might be termed the anarchic stage to the point where a reasonable profit would accrue to the entrepreneur,

¹. See p. 6 - supra.

the tendency of international cartels may be said to be purely regulatory. When this stage is passed it is possible to speak of them as exercising a monopolistic control of the market.

Whether or not in practice international cartels as a whole have tended to raise prices to the second equilibrium point and thus to be purely regulatory or to have entered into the state of pure monopoly, is a subject for empirical analysis and will be treated as such in the latter part of this study.

At this point it will be of more importance to repeat that the "monopoly dispute" has arisen, not as a result of the nature of cartels but of the nature of monopoly. The striving for classifying and naming that has characterized studies of international cartels has seriously hindered a real understanding of the phenomenon. No single definition or analogy will suffice due to the fluidity of change in economic society and it has been the aim, in part, of the preceding few pages to bring this out more clearly in order that the importance of treating the problem of international cartels from the strict viewpoint of modern economic reality only, may be clearly seen. When this is done the basis is laid for practical rather than strictly academic conclusions and it is submitted that this is the great necessity in the period of economic doubt, fear and hesitation that characterizes the world today.

Further Comparisons.

Nothing, perhaps, is as enlightening to bring out the fine points of a definition as a comparison. This is especially true of international cartels which stand in close relationship with national

cartels, trade associations, combines and mergers and with which a comparison is especially informative. Once again this section will be more in the nature of general remarks rather than detailed analysis, especially in connection with national cartels whose relation to the international agreements will appear more clearly throughout the course of the study.

(a) National Cartels

Modern industrial organization has been characterized by a rapid national economic growth that has preceded and formed the basis for the internationalism which has been compared above to a world fabric. There has been no study of international cartels undertaken that has not repeatedly emphasized the necessity of this national organization as a basis for departure into the international field.^{1.} In fact it has been stated that with the notable exception of the Maritime Conferences, all international cartels constitute extensions of existing national cartels.^{2.} Although this emphasis has been correctly placed it is impossible to state the exact degree of effective national cooperation necessary before domestic frontiers can be crossed. It has been asserted that in a given case a 60 per cent. control would be sufficient^{3.} but as this is only an approximation it would be impossible

^{1.} See particularly, Burn, op. cit., pp. 234-235; Domeratsky, L., "The International Cartel Movement" - United States Bureau of Foreign and Domestic Commerce, Trade Information Bulletin #556 (1928) p. 405; Levy, H. - Monopoly and Competition - p. 250; Liefmann R., "International Cartels" - Harvard Business Review, January, 1927, p. 130.

^{2.} De Roussiers, P. - "Cartels and Trusts and their Development" - League of Nations (1927) - p. 17.

^{3.} Donaldson, J. - International Economic Relations - p. 339. cp. also, Watkins, M.W. - Industrial Combinations and Public Policy - p. 37.

to base definite conclusions upon it. It seems safe to say however, that the degree of permanence to be expected from an international cartel is relative to the degree of unity exhibited by each of its members in their respective countries. This is substantiated by an examination of several representative international cartels which, if relative permanence can be used as a measure, have achieved a large degree of success. Their membership is comprised, almost without exception, of those national industries whose output is produced largely by a small number of works and in which the number of firms controlling the bulk of the output is smaller than the number of works. The International Steel Entente, for example, fulfills these conditions in all of its member countries, especially France and Germany¹. and, formed in September, 1926, has an existing agreement in effect until June 1, 1938. The same tendency is borne out in other directions. Germany, generally recognized to be the most heavily cartellized of all national economies². is a member of thirty-one of the international cartels of which record has been found. France, the closest to this, is a member of twenty-two. The United States and Canada, where legal restrictions have tended to discourage internal combination are members of twenty-two and six respectively. Lack of adequate information makes these figures incomplete, but they clearly illustrate, as a tendency, the fact that an organization of the whole industry on a national scale is

1. London and Cambridge Economic Service - Special Memorandum #39. October 1934 - p. 12.

2. "Practically every industry of any importance and lending itself to cartellization is organized into one or more cartels." Domertatsky - op. cit. - quoted in Curtis R. E. - Trusts and Economic Control - p. 405.

essential before an international cartel in that industry can be formed.

Three of the more important results of this tendency merit attention.

(1) From the fact that national cartels are a prerequisite of any international agreement it logically follows that the true causes of the latter are to be found in those of the former. That is, if we analyze correctly those factors in our present economic order that are conducive to the formation of national cartels we may expect to have the underlying causes of world and quasi-world cartels. Those factors that appear on the surface to stand in an a priori relationship with international cartels solely, can be placed in the category of secondary importance no matter what their nature. This would include, for example, the attempts at political rapprochements among European nations, often cited not only as the immediate but as one of the underlying causes of international cartellization.

(2) The commercial and financial developments of the present depression, reinforced by the national economic planning in vogue in most countries, have strengthened the position of national cartels.¹ Thus the basis had been laid for a strengthened international development. The fact that the latter has been severely checked by the disturbed state of world politics and the depreciation of sterling and other currencies that gave increased competitive advantages to the countries off gold, does not alter the fact that the strengthened national organization of industry has brought with it a foundation

¹. World Economic Survey 1933-34, pp. 72-73.

upon which we may expect a rapid international development as soon as immediate hindrances to such a growth are dissolved in the stream of inevitable progress.

(3) Any national change or disturbance of a social, political or legal character may have profound results upon international cartels of which that country is a member or prospective member. For instance, the type of economic nationalism that feverishly throws up tariff barriers results inevitably in increased cartellization as has been clearly demonstrated historically, especially after 1879 and 1908.¹ Likewise a change in the legal regulations pertaining to cartels stimulates or retards their outward growth with consequent effects upon international affiliations. Similarly, the development of a social psychology directed towards economic planning will indirectly extend the sphere of international cartels in the same way that, in the days when rugged individualism was necessary for economic progress, the sphere was lessened by public discouragement of national combinations.

Enough has been said in a general way to point out the close interrelation between national and international cartels and the necessity for an understanding of the former for a knowledge of the latter.

(b) International Trusts

To distinguish international cartels from international trusts, mergers and trade associations would be superfluous but for the fact that the words are loosely used even in authoritative books

¹. World Economic Survey 1933-34, p. 71. See also p. 93 infra.

upon the subject.^{1.} After careful differentiation in the introductory sections of the works, the authors have proceeded to use the various terms almost interchangeably, particularly in America where the word "trust may apply to any one of the legion methods of effecting a combination in trade."^{2.} This has been an unfortunate departure from the scientific character that pertains in most branches of economics and has caused a great deal of confusion and misunderstanding especially among younger students of the subject. In some cases the origin of such laxness may be found in the realization that combines and cartels are both aspects of the same force of industrial combination and that they differ fundamentally only in method. Such a belief, inherently fallacious, has not received the attention of authorities that it warrants and, as a result, the fallacy has never been completely exposed. The following analysis will have this in view.

The two principal types of industrial combination, cartels and combines, differ essentially in origin. While the former are born in periods of trade depression and business stagnation, the latter enjoy their greatest activity in boom periods. Thus the immediate aim of cartels is the avoidance of further losses resulting from the depressed and anarchic state of the market, and that of combines, the

1. Especially Plummer and Watkins, op. cit..

2. "The term trust has obtained a wider signification and embraces every act, agreement, or combination of persons or capital, believed to be done, made, or formed with the intent, effect, power or tendency to monopolize business, or restrain or interfere with competitive trade." - Dodd - "The Present Legal Status of Trusts" - Harvard Law Review, Vol. VII - p. 158.

increase of already rising profits. All variations in method employed by these two types proceed from this essential difference in origin and immediate aim. Any comparison that fails to take it into account is likely to be misleading and must be regarded as superficial.

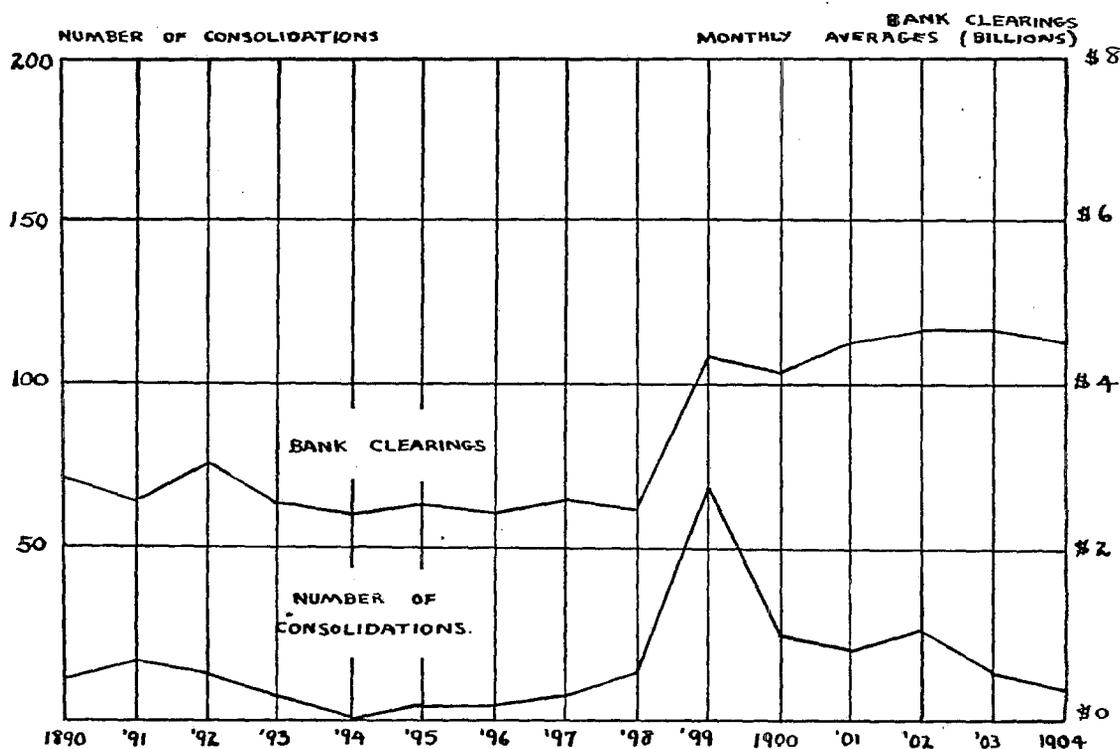
The problem of correlating the business cycle and industrial combination however, from the empirical standpoint, presents three important and almost insurmountable difficulties. In the first place, the looseness with which the terms have been used in the past makes it impossible to differentiate between the number of cartels or of combines formed in any given year. Secondly, even if this were disregarded, the lack of figures of any sort on the number of combinations effected at any given time is in itself almost sufficient to defeat our aim. Finally, the business development of any country is conditioned by the social, psychological and legal environment in which it grows and this has been sufficiently different in some countries, such as the United States and Germany, to make them almost economically incomparable for our purposes.

Doubtless these difficulties largely explain the lack of secondary source material bearing on this question. Regarding combines however, a few figures have been carefully compiled by Professor Watkins showing the number of industrial consolidations formed in the United States between 1890 and 1904.^{1.} It is possible to secure fairly reliable results by superimposing these figures upon a graph of general business activity adapted from yearly figures for bank clearings^{2.} and

^{1.} Watkins, op. cit. - pp. 317-324.

^{2.} Corrected to eliminate changes in the general level of prices.

verified by the business annals of the same period. Cartels, however, present a different situation as the only figures available are general estimates formed for lengthy periods of time.¹ In this case deductive analysis will have to be combined with historical evidence to arrive at any expression of a tendency. Regarding combines, then, the following chart may be examined. It is necessary to keep in mind that the scales used in plotting the curves are such that no great importance can be attached to their degree of slope.



It will be observed that in the United States for the first eight years (1890-1897) there is a remarkably close correspondance in the movement of the two curves. In only one year was there an opposite movement - the number of trusts declining slightly in 1892

¹ World Economic Survey 1933-34 - p. 71.

while the course of business activity was tending upward. From 1898 on, while the curves continue to show sympathetic movements these are by no means so pronounced as in the earlier half of the period. Nevertheless the trend of the curves throughout the entire period indicates clearly the fostering influence of prosperity upon the tendency to trust formation and the restrictive influence of depression. In other words, trusts were formed primarily as a means to the more vigorous exploitation of favourable business opportunities.

These results may be verified from the following table showing the number of consolidations formed in each year and the business conditions of that year as set forth in the Business Annals.^{1.}

YEAR	BUSINESS ANNALS	NO. OF TRUSTS.
1890	prosperity; recession	11
1891	depression; revival dullness continues until August when revival sets in. Moderate improvement in business and industry.	13
1892	prosperity; manufacturing expansion; decline in commodity prices.	12
1893	recession; panic; depression	5
1894	deep depression	0
1895	depression; revival	3
1896	recession; depression	3
1897	depression; revival	6
1898	revival; prosperity	18

1. Thorpe, W. L. - Business Annals pp. 136-139

1899	prosperity	78
1900	prosperity; brief recession slight check in expansion appears, spring, and disappears late in year.	23
1901	prosperity	23
1902	prosperity	25
1903	prosperity; recession, continued activity gradually retarded	8
1904	mild depression, revival	8

A glance is sufficient to show the definite relation between prosperity and trust formation on the one hand, and depression with its restraining influence on the other. In 1899 for example, a year of activity and expansion, there were 78 industrial consolidations effected, while in 1894, a year of continued and deep depression, competition continued completely unchecked. The same is true on a modified scale in every other year with the exception of 1892 when the number of trusts decreased very slightly during a period of rising business. The tendency is unmistakable. How may it be related to international cartellization?

In the following chapter it will be shown historically that cartels are nourished by depression conditions. Anticipating this evidence and combining it with the already known facts concerning trust formation, a wide disparity is seen to open up between the two types of industrial combination and out of this gulf emerges the answer to the problem aroused by the above empirical investigation. In short, it is the essence of trusts as distinct from that of cartels that causes the former to move with the business cycle and the latter against it.

Reasoning on the basis of given conditions will bring this out more clearly.

Let us first assume a state of depressed market conditions such as those existing in 1951 and represented graphically by the downward trend of the business cycle. Here a severe struggle is seen to be setting in as prices are driven down below the cost of production and the economically inefficient enterprises are refusing to leave the market to their competitors as long as their resources will hold out. Competition is rapidly becoming a cutthroat struggle for survival and economies in all directions are being effected by harassed entrepreneurs. And still the downward trend continues — Searching for a further means of staving off the seemingly inevitable industrial oblivion producers turn to loosely knit cooperative combinations, as a regulation of the competition driving them into bankruptcy is inherent in their very nature. Combines, on the other hand may be highly efficient without any attempt whatever at direct market control.¹ Although it is entirely possible that the latter form may finally emerge from the former after the cartel has achieved a degree of success, it seems impossible to avoid the conclusions of the following syllogism — The principal pressure on the entrepreneur comes from the sinking of prices below cost of production level and kept there by cutthroat competition. The essence of cartels is attempted regulation of prices through market control and that of trusts primarily the benefits

¹ "It (combine) is not directed toward a regulation of the market, but toward an improvement of the organization of production and distribution" - Von Beckerath, H. - Modern Industrial Organization - p. 285. Cp. also De Roussiers - op. cit. p. 10. With cartels, on the other hand "the losses caused by inefficient management must be borne by the individual business unit" Burn - op. cit. p. 147.

to be derived from collective efficiency. Therefore a given group of entrepreneurs would consider the cartel to be the more desirable means of alleviating their position during the downward trend of a business cycle.

This reasoning would explain why cartels move predominantly against the business cycle. Now if it can be shown deductively why trusts originate chiefly during the upward swing of prosperity, as the figures cited previously tend to show, then the thesis will be established that cartels on the one hand and trusts on the other differ fundamentally in origin¹. and a basis will be formed for a clear distinction and separation between them, hitherto lacking in most works upon the subject.

To demonstrate this it will be necessary to assume a period of rising prices and general prosperity, represented graphically by the upward swing of the business cycle. Here we may fairly suppose that businesses are expanding and profits, in most cases, increasing. Psychological optimism is being created and transferred cumulatively from one entrepreneur to another and all the characteristics of a boom period are being evidenced on every side. With such a development efficiency tends to become less and less as the pressure of severe competition is slowly raised from the necks of business. Although prospects of high gains still stand prominent on the horizon, to men schooled in business the possibilities of still higher gains are yet more attractive and

¹. Cf. "Cartels ... and combines have their origin in the same economic difficulties." - Wiedenfeld, K. - "Cartels and Combines" - League of Nations Report (1927) - p. 5.

this is where the inevitable result of such a "remorseless sort of profit seeking" enters.

Before continuing it will be well to remember that there are very few producers in the world of a sufficiently individualistic temperament that they would not combine under the temptation of increased profits. As Professor Levy has clearly pointed out,¹ this was true even in the so-called "individualistic age" in England, generally recognized to be one of the few countries where entrepreneurs were not susceptible to combination.

To continue, however, as profits increase and business expands the dormant tendency towards industrial combination is awakened as had been the case at the opposite end of the business cycle. Here however, the immediate aim is different and this obviously will be reflected in the type of combination chosen. When the aim was the avoidance of losses in a depression market, the cartel form received the attention of producers as it was primarily adapted for regulating the market. Now, however, the goal is one of increased profits and the greatest obstacle to its attainment, not the condition of the market, but the limits imposed upon further production by the tendency towards increasing costs. A combination in which the members retained their individual freedom of action in technical and business matters would not supply sufficient productive technique to counterbalance this increasing cost per unit. On the other hand, the well known economies that result from a complete fusion into one central administrative and financial

1. Levy, - op. cit. - p. 177.

unit^{1.} would doubtless draw the effective attention of entrepreneurs to this integrated type of organization. As with cartels a logical syllogism could be formulated at this point to sum up the conclusion to which this reasoning has led but it would be redundant in that the result is obviously the same as that reached by the statistical analysis.

It is thus apparent that cartels and combines differ essentially in origin. Inevitable exceptions of course make this conclusion more the statement of a general tendency than of a rule or economic law. For example, record has been found of far-sighted industrial leaders who, in periods of favourable business conditions, organized cartels in order to regulate competition so that overproduction and its repercussions would not occur with a decline in business activity. Likewise basic differences between certain industries must, of necessity, entail reactions of a different nature than those pictured above. Nevertheless the tendency is of sufficient strength to make particularly surprising the frequent confusion of the two terms in popular and scientific works upon the subject. This is all the more remarkable when their essential difference in origin is recognized to be merely the basis of many important differences in structure and methods. As the latter appear in full in most studies of the subject, a brief table setting forth their more important distinguishing characteristics will suffice at this point.

1. "A combination of several plants into a larger internally rational and firmly organized economic unit gives the new unit absolute superiority over the small and disintegrated competing enterprises and plants." Von Beckerath, - op. cit. - p. 286.

Table Showing Secondary Differences Between Cartels and Combines.	
Cartels	Combines
Temporary; rarely formed for a period over five years.	A tendency toward permanence. Sometimes formed for long periods such as 99 years.
Seldom holds property - in rare cases it takes on the form of a company proper.	"great unified legal entity holding property of its own."
Presupposes complete independence of members, i.e. diffusion of power.	Involves control of one member by another. i.e. concentration of power.
Essence is market control.	Essence is collective efficiency in productive technique.
Agreement is the outcome of many negotiations and conferences in which the members participate.	Agreement is usually the result of an extraneously imposed will.

A table such as this assumes an artificial and misleading aspect unless it be remembered that no hard and fast lines divide the loose from the more closely united combinations, imperceptible differences of degree leading from one to the other. Two implications of this fact should be noted. (1) As the number of different forms represented in each of the two main types is almost legion, it happens in some cases that a predominantly loose form possesses definite characteristics of the closer union. Trade Associations form a case in point. Normally associated with cartels and other such amorphous agreements, they are established usually as permanent institutions¹ which is clearly a characteristic of an integrated combine. (2) As our modern economy

¹. Sharfman, A. L., - American Economic Review. Vol. XVI #1, Supplement, March 1926. p. 204.

is not static but highly dynamic, in many cases successful cartels of twenty years ago are now clearly trusts or combines. This has been the outcome of either the pressure exerted by horizontal cartels to produce vertical trusts, or the financial success and predominance of some member of a cartel which has enabled it to obtain such control of its associates that a trust has naturally emerged.

Nevertheless, if the limits imposed by these two illustrative examples are kept in mind, the division of all international industrial agreements into two main groups according to whether the control is diffused or concentrated is sufficiently accurate for the purposes of this study. At the least it will prevent a repetition of the confusion usually arising when the two terms are used in conjunction with one another and will lead to a clearer understanding of the essential characteristics of international cartels.

Further Classifications

International cartels may be classified under three distinct headings, that of form, of scope and finally of method. The growing complexity of all international economic affairs is a sufficient justification for this distinction. Without it, any analysis is certain to collapse from the clouding of essential characteristics. Contrary to the opinion of many young economists at least, cartel classifications are not a matter of form to be rigidly adhered to, but a foundation that is never static but continually changing with modern dynamic conditions and hence needing constant repetition and revision.

(1) First, then, following Lieftmann¹ whose concise statement

¹. International Cartels, Combines and Trusts, p. 38.

needs but little alteration, international cartels may be classified according to the form that they assume. These are four in number.

(a) An association composed of national cartels or combines of different states. (b) A direct terminable agreement between individual producers in different states. (c) An agreement between a national cartel on one side and an individual producer on the other, such as the International Incandescent Lamp Cartel in which the French producers are already combined in the Compagnie des Lampes, while in the other countries individual firms participate. (d) An agreement between international combines or trusts. This classification passes from academic to practical value especially when an analysis of a particular international cartel or group of cartels is being undertaken with the end in view of discovering their effect upon the various elements that go to make up the economic state. More will be said in this connection in due course. At present it will be more advantageous to pass to the second main heading under which international cartels may be classified, that is, the general topic of size or scope.

(2) Let us assume for the sake of clearness that at any given time international economic relations may be viewed pictorially in a static condition, the constant growth of cartels for a moment having ceased. From the maze of interrelations showing the membership of the various cartels a distinction would visibly emerge between what may be termed "world cartels" and those whose members represent a few countries only. In considering the former it becomes immediately apparent that a further subdivision is necessary for scientific

thinking. There are what we might term true world cartels and virtual world cartels. In the former all the principal producing countries regardless of geographical distribution are formally members of the cartel. A case in point is the International Zinc Cartel whose membership comprises the producers in Canada, France, Belgium, Germany, Netherlands, Norway, Poland, Czechoslovakia, Italy, Spain, Mexico and Australia. A virtual world cartel on the other hand is formed by a series of special agreements between members of an international cartel and outside producers who prefer to remain outside of the cartel in all of its operations but who will conclude agreements along certain important lines. Thus the American and English steel producers, although not members of the International Steel Entente have concluded with that organization special sales agreements covering pipes and metal plates.^{1.}

International cartels whose membership is confined largely to a few countries, usually of Central Europe, which do not produce a large proportion of the world output, are of importance to this study largely through the basis they form for a comprehensive world agreement. As the number of producers becomes smaller the probability of the evolution of a world cartel becomes more certain. In fact, this has been largely the way in which the majority of world ententes have evolved. The International Tube Cartel, for example, which sprang originally from a combination of German producers with certain others in Polish Upper Silesia and Czechoslovakia, concluded

^{1.} Plummer, op. cit. - pp. 16-17.

an agreement in 1927-1929 with a group made up of the British, Canadian and United States producers thus embracing between them practically the entire world output of their product.¹ This example is illustrative of a tendency concerning which it might be said that, as national organization is necessary for an international agreement, so some degree of the latter is necessary before a world or virtual world cartel can be formed.

(3) Finally, and probably of most importance, is the classification of international cartels according to the various methods by which each cartel pursues its own particular interests. These vary with the character of the industry involved, the geographical situation of the various members of the cartel and the particular exigencies which gave it birth. The different interpretations and classifications of such methods vary almost directly with the number of authorities upon the subject. To choose, for example, a plan such as that given by Dr. Burn² would be extremely valuable due to the wealth of detail that it affords. And yet, on the other hand it would be distinctly ill-advised for a study of this character due to the disproportionate weight that it would tend to give to what, in this analysis, is a relatively unimportant field. For that reason it is deemed advisable to merely direct the reader to that unusually fruitful work, and to reproduce here what appears to be the best of the shorter and more

¹. This agreement was renewed in April, 1933.

². *Op. cit.*, pp. 195-238.

general classifications, that of Dr. Liefmann.^{1.} Taken in order of decreasing frequency then, it is possible to observe five different types of structure among existing international cartels.

(a) Purely regional cartels which reserve each separate territory as the market for the sale of products manufactured by the business firms of that territory.

(b) Regional cartels along with agreements concerning markets in other countries.

(c) Simple mutual agreements regulating prices without regional cartels and without arrangements concerning the amount of production and markets.

(d) Mutual agreements to limit output, which are probably the least frequent forms of all, as international cartels do not, as a rule, have control over raw material and means of production.

(e) Syndicates, in the real sense of that term, which share orders and profits and control the entire market for their special wares. These are also rare, and exist mainly in connection with certain chemicals such as bismuth and borax. With these it is not a question of agreements concerning supply quotas in third countries but of complete regulation of output, and at the same time, of markets.

To arrive at a classification such as this without first analyzing the regulatory functions of national cartels is to invite misunderstanding. Broad general statements too often leave no idea

^{1.} quoted almost verbatim from "International Cartels, Combines and Trusts" pp. 39-40 and Harvard Business Review, op. cit. pp. 130-131.

at all of the complexity of elements at work in economic questions. Recognizing this and also being aware of the obvious impossibility of entering into any adequate survey in this study, the various functions that international cartels may assume through their member bodies have been collated in a self-explanatory chart which appears in the appendix. This will give specific details of the various subdivisions that come under the third principal category into which international cartels fall, namely that of method.

We have now reached the point where general considerations, definitions and classifications may cease. We have seen the true nature of international cartels through a discussion of their alleged monopolistic tendencies, of a comparison of them with national cartels on the one hand and trusts and more integrated concerns on the other. We have classified them under three main headings, that of form, scope and method and subdivided each of these still further. Recognizing the principle of continuity underlying all economic considerations we were careful to note the absence of any sharp lines dividing the various types of international cartels that have been considered, their differences being rather of degree than of kind. Finally, inherent in the whole analysis has been an attempt to reach an understanding as to what international cartels really are. For only when this is done can their history and present day effects be understood and judged, their effects not only upon man, both the agent and the end of all production, but upon the material agents and factors of production, and finally upon the broader questions of peace and war, vital elements of civilization itself.

CHAPTER II

Historical Notes.

The history of any industrial organization is intimately connected with the organization itself and the latter cannot be understood apart from a knowledge of the former. This statement is a truism that finds unanimous expression in nearly every modern treatise, especially upon the subject of international industrial ententes. Unfortunately, however, no such unanimity exists when it is the history itself that is under consideration rather than the mere statement of a truism. The responsibility for this disagreement rests almost wholly upon the clear insight and infinite patience with which Dr. Roman Piotrowski has conducted his exhaustive researches into the history of cartels and trusts. Until his book appeared, all discussions of cartel history seemed enveloped in rather a self-satisfied complacency resulting from a belief that the subject was complete, that nothing more could be added to what already has been said and done. Dr. Piotrowski succeeded in shattering this illusion and in dividing historians of the international cartel movement into two opposing camps. It will be the first aim of this chapter, insofar as the boundaries erected by the inaccessibility of primary sources permit, to draw upon each of these divergent groups in an endeavour to set up what appears both deductively and empirically to constitute a concrete body of truth respecting international cartel history. Secondly, this historical outline, in combination with other known facts will enable definite conclusions to be drawn regarding the causes of the movement together with the aids and obstacles that such an organism inevitably encounters.

inally, in conclusion, an estimate will be made of the present day extent of international cartellization.

he Historical Controversy.

The whole historical controversy revolves around the question whether international cartels may be regarded as of relatively modern growth, or whether, on the other hand, they should be linked up with somewhat similar organizations in ancient and medieval times. Dr. Piotrowski, pointing to facts "established in history beyond doubt" traces international cartels as far back as 1301¹ and national cartels even farther.² Most other authorities implicitly follow Dr. Liefmann in the belief that international cartels are separated from "the systems of privileges and monopolies of former times"³ by a wide gulf; that they stand as "detached events", with little or no historical connection with the movement which was supposed to have begun with the crash of 1873.

There are a few general considerations which may aid in the solution of this problem. In the first place we know that the ultimate causes of economic industrial phenomena are not to be found in material conditions but in the psychology of industrial leaders. Dominantly and continuously occupied with making money, their calculations of private advantage, if not in disregard of, certainly take no regard for injurious consequences upon the interests of others.

1. Piotrowski, op. cit., p. 309.

2. "Analogous unions of producers and merchants ... were known for whole ages before Christ." Ibid., p. 85.

3. De Roussiers, op. cit. p. 3.

This trait in human character undoubtedly existed at a much earlier date than that with which we are particularly concerned. Many decades before the Neckar Saline Union took form in 1860, an agreement that Dr. Liefmann and his almost verbatim followers regard as the first genuine international cartel in existence,¹ Adam Smith made an interesting reflection in this connection. He wrote - "People of the same trade seldom meet together even for merriment and diversion but the conversation ends in a conspiracy against the public or in some contrivance to raise prices."² This is of importance in that it is not the expression of a particular but of a universal fact, a fact that is as true to-day as the day that it was penned, and no more true then than in the fourteenth century. It is impossible not to conclude that the psychological impetus necessary for the formation of cartels was latent in remote times.

Cartellization, as has been noted, is a natural outgrowth of competition, natural in the sense that wherever competition exists, the "purposive action of individuals in pursuit of gain" will result in some restriction of that competition. This is the core of all cartels, modern or ancient and as such, constitutes a stimulus to investigate the statements of Dr. Liefmann characteristically written without footnotes or bibliography and purporting to show that cartels must be regarded as an essentially modern development. Upon the results achieved

1. Liefmann - International Cartels, Combines and Trusts, p. 42.

2. Wealth of Nations I, 130.

In this direction most other authorities upon cartel history¹ must stand or fall as they appear to have followed Liefmann's leadership, on the historical question at least, with little or no scientific probing of the latter's assertions.

It is of course, admitted as a basic premise that early cartels differ in many ways from those of the present day, but the investigations to be conducted will attempt to show that these differences are merely of degree and not of kind, and that there is no break in the continuity between the first international cartel of 1301 and the latest of the modern day. It is necessary in the first division of this analysis, to follow Dr. Piotrowski almost exclusively as no other English speaking authority has treated of international cartels formed before the nineteenth century. After this period has been reached however, evidence accumulated by other economists will be introduced.

The Period from 1301 to 1860.

Exactly 559 years before the official birthday of international cartels in 1860, that is, in 1301, record has been found of a producer's cartel combining rival enterprises of two different states, the earliest known practical instance of an international cartel planned for the international market.² As far as can be determined, this cartel differs from analogous unions to-day only in name. Further examination will bear this out and at the same time will throw valuable light upon the origin of old cartels.

¹De Roussiers, p. 2 - Von Beckerath, p. 15 - Levy, p. 261 - Plummer, p. 2, and Herriot - The United States of Europe - p. 138.

²Piotrowski, op. cit., pp. 133-135.

This "societas communis venditionis" was formed between two rival salt producing enterprises in Aignes - Mortes and Provence, the former belonging to King Philip the Fair and the latter to Charles II, King of Naples. The raison d'etre was the same old story, familiar to us now, of an excess of supply over demand with its inevitable cut-throat competition. Had the demand for salt exceeded the supply at the time, there would have been no need for such a far-reaching restriction of the independence of the mines but as it was, a cartel could be the only practical solution. Dr. Piotrowski has undoubtedly succeeded in showing the essential similarity between this cartel and those modern production cartels which are more or less familiar to us now. "Both originate in the very same competitive struggle for a market glutted by over-production which either diminishes the profitability of the rival enterprises or frustrates its increase."¹ Aside from this similarity in origin it may be noted that the salt cartel constituted what to-day would probably be called a syndicate, that is, a company formed for a joint disposal of salt from the mines of both parties at a uniform and higher price than hitherto had prevailed. In view of this it is rather difficult to justify Dr. Liefmann's omission of any mention of this cartel in his "historical notes" which appear in essentially the same form in all of his treatises that have been translated into the English tongue.

The next step forward in international cartel history came in 1470 with the formation of a "most-up-to-date" alum cartel.² Once

¹. Piotrowski, op. cit. pp. 133-135

². Piotrowski, p. 155.

again it was a question of two "competing monopolies" with an excess of supply of alum. "Neither of the parties could utterly win or lose and the fight was only to the detriment of both. The growing production of both mines made the contest for an expansion of the market still more acute and brought about the usual further decline in price. An agreement became an urgent necessity and was ultimately reached."¹ In the resulting written contract the parties stated quite frankly that the purpose of the agreement was to keep the price of alum as high as possible "as it was declining owing to mutual competition and excessive supply."² This appears to the student of to-day to be the essence of modernity. The same is applicable to the internal management of the cartel. All contracts of sale were made jointly by agents of both partners and each of the latter delivered half of the quantity ordered. The price of alum was also fixed by the partners and if one of them made an agreement for delivery of alum below the cartel price, he was obliged to make up for the other partner's lost profit, otherwise the profit was always halved between both members. Regarding the observance of the agreement, a "mutual far-reaching control" was put into effect by which representatives of one partner had the right to inspect the mines and establishments of the other. Both partners had to submit to these officials details of their output and sales and by this means production remained under absolute control of the cartel.

It is thus apparent that many centuries before the official origin of international cartels there were in existence agreements in

¹.Piotrowski, op. cit. p.155

².Loc. cit.

no respect inferior in internal structure to their modern successors.

It would be beyond the bounds of this study to enter into a discussion of the question whether the cartels of the Middle Ages represented fiscal ventures or were the result of private initiative. The presentation of the evidence on either side is the work of an eminently historical paper. In view of the evidence presented by Dr. Piotrowski¹ however, it seems safe to conclude that they resulted from private initiative within the bounds of royal prerogative, the extra revenue accruing to the king being merely a secondary and fortunate coincidence. This conclusion, it will be noted, substantiates the view already expressed, namely that the international cartels of the Middle Ages did not differ in any essential characteristic from those of the present day.

In 1498 the most important commercial cartel of those days was formed controlling the European copper market at Venice.² This cartel, like its predecessors resulted from a fierce form of competition which led to a fall in the price of copper and entailed considerable losses for the four member companies. Using the modern quota system by which a certain percentage of the total production was apportioned to each company, the cartel standardized selling prices and set up a common selling agency by which the quota was enforced.

As these three examples are representative of those international cartels which followed throughout the next three centuries, it will be sufficient at this point to merely summarize the further

1. Piotrowski, op. cit., pp. 159-164.

2. Ibid, p. 164.

sults that have been reached from a study of these agreements. They
e found to have been in operation for copper, vitriol, salt, mercury,
liver, amber, tin, pepper and wool. Both voluntary and compulsory
artels embraced many varieties common to those to-day, such as quota
and price fixing cartels, cartels with a common selling agency and common
participation in profits, typical district cartels, cartels that in-
directly influenced production by "regulating the supply and demand of
labour in the mining industries of both countries"¹. and various degrees
of combination of these varied structures such as that evidenced in the
copper cartel of 1534. "This project combined the classical production
cartel with apportioned production and centralized sale and the price
and conditions cartel, and also to some extent the district cartel, no
different in essentials from analagous production cartels of the highest
order."²

Regarding the origin of these cartels which almost invariably
appears to have been grounded in market depressions and the resulting
severe competition,³ it will be well to remember that Dr. Piotrowski,
in attempting to establish the thesis that cartels resulted from an
excess of supply over demand and not demand over supply as some of his
critics had suggested, and he is attempting to do this by historical
illustration which leaves wide room for selection of unrepresentative
examples. The general tenor of his scholarly work however leaves this

¹ Piotrowski, p. 243.

² Ibid., p. 263.

³ "The cause of its formation (the copper cartel of 1534) was the same
as that which almost invariably underlies the origin of nearly all
cartels, viz., rival competition diminishing the profits of the enter-
prises concerned." Ibid., p. 261.

as just a remote possibility which, while advisable to keep in mind, may be disregarded for all practical purposes in this study and the results summarized above may be taken as the unbiased and careful work of a tireless economic historian.

The Period from 1860 to 1914.

The historical period from the "official birth" of international cartels in 1860 to the world war in 1914 constitutes a period in cartel history that deserves separate consideration for two reasons, the world wide spread of industrialism and the growth of "big business" in those years. By mutually making competition more intense these two forces exerted a double impetus to the combination movement and at the same time made the latter easier as it is obviously more difficult to secure agreement between a large number of small firms than between a comparatively small number of large firms. Thus, as a result of these two forces working together in the same direction, the growth of international cartels between 1860 and 1914 was almost phenomenal and as such deserves the attention given to it by Dr. Liefmann and other lesser authorities, although, as we have been careful to point out, they were at fault in not recognizing the essential continuity of the movement from at least as early as 1501.

This period of increased expansion commenced in 1860 with the formation of the Necker Saline Union which included the salt works of Baden, Württemberg and Hesse and which has survived without break to the present day, having concluded an agreement with the syndicate of Eastern French Salt Works in 1867. This was followed by the Luxemburg-Lorraine Iron Ore Association of 1879 and the Bismuth Syndicate of the

late seventies and early eighties. Ten years of severe competition in railway building resulted in 1883 in the formation of the oldest international rail cartel between producers in Germany, Belgium, England and France. This agreement however proved to be very short lived and was followed in 1904 by a regular Association of Rail Makers with a sales office in London which took orders and divided them according to agreed quotas of the world market, while the individual countries reserved the home market with certain other markets to themselves. In the iron industry, iron bars, pipe, rolled wire, drawn wire, wire tacks, wood screws and enamel ware¹ were the subjects of international cartels prior to 1914, the majority being formed between Germany and Austria, Germany and Belgium or England.

Raw zinc, copper, lead and practically all other industrially important metals were produced or marketed through international cartels in these years as well as several semi and completely manufactured products from these metals.

In the field of minerals and soils there were numerous international agreements effected. As early as the nineties various cement cartels were formed between German firms and those of Austria, Switzerland and Belgium respectively, and in 1905 with England, France and the Scandinavian countries. The most solidly organized cartel in this series however was the one dealing with the manufacture and sale of mirrors. It came into being first in 1903 at the initiative of large French and Belgium producers and immediately effected a general limitation of pro-

¹ For brief but enlightening accounts of international cartellization for bolts, screws and enamelled ware, see Liefmann - Harvard Business Review - op. cit., pp. 45-46.

duction. In the following year it was reorganized into a regular selling syndicate, the Convention Internationale des Glaceries, with headquarters in Brussels. Originally formed for a period of five years, it was renewed periodically until 1914. The European Bottle Cartel founded in 1907 for the acquisition and introduction of the Owen's machine for blowing bottles was the most extensive and important cartel in the glass industry before the war and comprised producers in Germany, France, Holland, Austria, Bohemia, Hungary and the three Scandinavian countries.

Although only a small number of international cartels in the chemical industry is known to the public, there is reason to believe that their numbers were very great before 1914.^{1.} The first international agreement in the aluminium industry (1901) is of particular interest as it clearly illustrates the ease with which a world wide cartel can be formed if the total world output is divided among a small number of concerns, each of which exercises a high percentage of control in its own country. In this particular case the five French participants were firmly organized into a shareholding company, "l'Aluminium Francaise". The leading European manufacturers, the Aluminium Industry of Neuhausen, did business through four factories in Switzerland, Germany and Austria. Holding an absolute monopoly within the United States, the largest international manufacturers, the Aluminium Company of America also controlled the Canadian firm, the Northern Aluminium Company. The three businesses in England and Norway were closely connected and the one firm in Italy was also a member of the cartel. This high degree of national and

^{1.} For the most part they are agreements among few firms which can easily be kept secret.

international control made the formation of a virtual or a true world cartel highly probable and in 1901 the former was concluded,^{1.} dealing both with prices and with limitation of output. The agreement lasted until 1908 when it collapsed^{2.} and was replaced in 1912 by a cartel which came to an end during the War.

During this period in other fields there were international cartels for flax, spare parts of watches, calcium carbide, silk dyeing and weaving, silk thread and ribbons, machine knitted scarves and mufflers, the turnery and joinery business, incandescent lamps, and finally eighty international agreements in shipping. Excluding the latter there were forty-one international cartels known in 1897^{3.} and by 1914 this number had increased to 114, distributed among the various industries as follows.^{4.}

Transportation.....	18
coal, ores, metals.....	26
stones and earth.....	6
electrical industry.....	5
chemical and allied.....	19
textiles.....	15
stoneware and porcelain..	8
paper.....	7
miscellaneous.....	10

114

1. The Aluminium Company of America was not included in the cartel but had a regional agreement with Neuhausen. See Liefmann, Harvard Business Review - p. 50.
2. Due to the extreme rise in prices from $2\frac{1}{3}$ francs in 1901 to 5 francs in 1907. Loc. cit.
3. Report of the Industrial Commission 1901. p. 143.
4. Hotz, W. - "International Private Agreements in the form of Cartels, Syndicates and other Combinations." Journal of Political Economy, October, 1920 - p. 659.

The method used by the majority of these cartels was the preservation of an undisputed internal market. The regulation of prices was the underlying purpose of many others. "In other cases an exchange of patents or of technical process was agreed upon while still others provided for elimination of unprofitable lines of manufactures and restriction to certain standard sizes, grades, qualities, etc. Finally, curtailment of overproduction and joint purchase of raw materials or of supplies formed the basis of many commercial ententes."¹ This quotation admirably sums up the varied methods and purposes of most international cartels immediately before the War and from it, it is evident that by that time international cartels had far more than passed the embryonic stage and a firm structure had been set up from which they were rapidly spreading in all directions. The peak of their development had not yet been reached however, as a brief outline of post-war international cartellization will tend to show.

Post War History.

The World War bore a paradoxical relationship to international cartels in that it put an end to the movement and at the same time set up conditions that make it very probable that some degree of international cartellization will long remain as a permanent institution, at least in Europe if not throughout the world. By severing political and economic relations between economically unified countries in which the component parts of important international cartels were domiciled, the movement was naturally brought to a halt and a large part of the 114 cartels in

1. Notz, W. - op. cit. - Journal of Political Economy, October 1920 - p. 659.

existence before 1914 were dissolved. This was aided by the fact that several basic industries were turned into auxiliary organs of the governments' war time administration and were thus forced to work against their normal goal. From organizations for the regulation of the market in the interest of the producers, they became organizations for the regulation of the market in the public interest, a transformation that automatically dissolved the very essence of international cartellization, that is, co-operative organization for increased private profit with little or no regard for its effect upon the "public interest." It is thus evident that from 1914 until well after Versailles, few, if any international cartels could be sufficiently strong to resist the combined force of these two wartime tendencies and as a result the connecting links of every international cartel of any importance existing in 1914 had been severed shortly after that year.

Much remains to be said, however, on the other side of the war cartel paradox. Although the acidity of war succeeded in dissolving the bonds of existing international cartels, yet at the same time it generated fundamental conditions that could only result in increased cartellization as soon as the shadow of the eclipse had passed. As an understanding of these conditions is invaluable to, and almost synonymous with, an understanding of the present international position of the cartel, some consideration should be given to them here, the pitfall of post hoc ergo propter hoc being carefully kept in mind.

All disturbing influences introduced into the international economic sphere by the war tended to produce different degrees of the same result, increased competition, so that the combined effect of these

influences was an international competition the fierceness of which had been hitherto unequalled. The disturbing elements were at work in several fields. On the supply side there was a tremendous expansion of productive powers during the War due to the internal economies of war time productive technique and the external economies of ordinary productive growth. After the War, as a result, the market was faced with an increased plant and a swollen supply. On the demand side the factors were even more pronounced. Every country, particularly those of Central Europe faced, and are still facing, dire impoverishment. This, combined with financial demoralization, produced a progressively shrinking market whose effective demand was but a fraction of the potential output. The condition produced by this drastic decline of purchasing power coupled with increased potential production was such as to be easily aggravated by the marked tendencies of each nation to attain a high degree of self sufficiency. The intensified nationalism created tariff barriers which, in turn, fostered the rapid growth of internal industrial combinations of various degrees of integration,¹ a basis which, as has been noted, is necessary for any cartel venture in the international field. With this as a foundation, and stimulated by an excess of supply over effective demand, it was only natural that entrepreneurs of different countries should seek in the international cartel a cure for the economic distress.

In the monetary field more might be said of the "financial demoralization" mentioned above. Plunged into a wild inflation im-

¹. See pp 93-97

Immediately after the Armistice, many European countries were faced with a depreciating currency situation which fostered the fiercest sort of competition. For a time the inflation States found that they could undersell foreign competitors but this condition was short-lived. Anti-dumping duties were soon raised against their exports and competition began to assume a more anarchic character. In the face of such conditions all States concerned were glad to negotiate for an understanding with their neighbours in the form of an international cartel.

An equally, if not more important cause of post war cartelization is to be found in the political sphere, that is, in the "splitting of hitherto combined economic areas of Europe by the Peace Treaty." ¹ In the place of the former Empires or kingdoms of Russia, Prussia and Austria there have risen on the post war map of Europe more than a dozen republics and tariff areas formed with little, if any, regard for economic boundaries and needs. Eighteen years of experience with the absurdity of this short-sighted action has been ample to condemn it. It left the majority of the new states with economically bad frontiers which made them an easy prey to the ravages of the more powerful of the European producers who, by their cutthroat tactics were almost able to completely submerge their relatively smaller competitors. The demand of economists that national foreign policy should recognize the fact that economic and political boundaries do not necessarily coincide has been like a voice crying in the wilderness. Governments and parliaments, engrossed with post-war political problems have consistently turned deaf ears to the economic needs of industry. Private producers, facing industrial oblivion were forced to take matters in their own hands and

¹ - Liefmann - op. cit., Harvard Business Review, January 1927, p. 137.

the only means within their power of restoring the pre war economic entities and raising international competition from an anarchic to a controlled sphere was the international cartel. It was inevitable that this means should be chosen. To the resulting international cartels belong particularly those of the iron industry, between the Austrian, Hungarian, Bohemian, Polish and Roumanian producers, and those of the cement, pottery and other ceramic industries.^{1.}

No discussion of the causes of post war international cartellization would be complete without an analysis of the interacting relations existing between international cartels and the tariff but due particularly to the contradictory nature of that subject and its undoubted importance it has been thought advisable to consider it in a separate chapter.

It is thus apparent that post war international cartels developed primarily as an attempt to reconstruct the European business world which was doomed to inevitable chaos unless accord could be reached among the various parts of the industrial order. It should be clearly emphasized however, to avoid misinterpretation, that the growth was merely accentuated by the wartime economic disturbances and that the thesis introduced at the beginning of the chapter showing the definite and essential continuity between modern cartels and those existing at least as early as the fourteenth century, is not in any way impaired by the evidence just presented. The faulty capitalist distributive system whereby effective demand bears a very small ratio to

1. Liefmann, op. cit. Harvard Business Review, January 1927, p. 137.

potential production is the ingrained cause of all national and international cartels and the same defect in the Middle Ages brought the same result, but, of course, upon a much smaller scale. The War merely increased this excess of potential supply over demand and thus intensified the resultant competition and cartel formation.

To-day the extent and implications of the movement are greater than ever before and organizations such as the European Steel Entente are significant parts of the framework of a world industrial structure. To concur in M. Domeratsky's statement that "the cartel movement has become more or less stagnant"^{1.} is possible only with reference to national cartels and then only relatively to the more rapid growth of the combine movement. In the international sphere, it seems safe to say that, accelerated by the depression,^{2.} the formation of industrial ententes has not yet reached its zenith. Keeping this in mind, its present extent may be briefly surveyed.

"The major portion of the European rolling mill industry and a high percentage of the world production of steel tubes and rails are organized in zone and quota-fixing cartels and partly in price cartels and syndicates."^{3.} The Sicilian sulphur pits and the American sulphur producers have divided up the world sulphur market. The German and French potash producers have reached a mutual agreement through which they are able to exercise a virtual potash monopoly. The world production of unpolished diamonds and a large number of metals such as copper, lead, zinc, magnesium, bismuth, antimony, quicksilver, ferromanganese, ferrosilicon and aluminium have been combined into compre-

^{1.} Domeratsky, op. cit., p. 405.

^{2.} World Economic Survey 1933-34. p. 71.

^{3.}

hensive European or world cartels. Furthermore we find international cartels in the electro-technical, chemical, glue and incandescent lamp industries, in the enamel goods, glass, ceramic, paper, wooden screws and ball bearings industries as well as in small groups of machine and iron manufacturing industries. The chemical industry is well represented in the movement with cartels for borax, calcium carbide, dye-stuffs, explosives, Glauber salts, iodine, chestnut extract, quinine, nitrogen fertilizer, sulphuric acid, superphosphates, nitrates, cellulose, tartaric acid, basic slag and chlorates. International cartels have been developed or organized also in the textile industry (particularly in the velvet and silk industries and in the sewing thread and silk finishing industries) in the button industry, and for the production of linoleum. Although the majority of existing agreements are largely confined to two or three countries of Central or North Western Europe, the movement is sufficiently widespread in its total fabric, involving Great Britain, the United States and Canada, and, in some respects, other parts of the world, to amount to a broadly world-wide phenomenon.

The strictly historical phase of the international cartel movement may be concluded by a summary of the results that have been reached.

(1) The historical continuity of international cartels is unbroken from at least as early as 1501 to the present day. No essential difference marks off the earlier from the later cartels.

(2) The movement was accelerated after the economic crisis of 1875, first by the effects of that and later crises, and secondly by

the rapid growth of capitalist enterprise.

(3) The World War and its immediate results such as economic nationalism, formation of new boundary lines, currency depreciation and general industrial stagnation destroyed most of the existing cartel organizations but also helped ultimately to produce others.

(4) The chief cause of the movement is inherent in the present system of production and distribution whereby potential supply is always far in advance of effective demand. The anarchic character of the resultant competition tends, in the natural course of events, to produce industrial ententes whether it takes place in the national or the international field.

(5) Secondary causes include (a) arbitrary formation of political units without regard to economic factors (b) marked and continual fluctuations of prices (c) prospects of higher profits through reduction of internal costs. This pertains particularly to more highly integrated combines and trusts but is a factor in the formation of certain types of international cartels.

(6) The movement is more extensive at the present time than at any previous period of its history. The present world economic depression has probably accelerated rather than hindered the development.

CHAPTER III

Effects and Tendencies

International cartels are essentially capitalistic, that is, profit-making constitutes their sole raison d'etre. They pursue such policies as seem likely to pay them best, whether or not these happen to coincide with the best interests of consumers, wage earners or society as a whole. It is not surprising, then, that among most classes an attitude of suspicion and fear has arisen before the alleged "sinister machinations" of such international commercial giants. Even among economists the question as to the economic advantages of international cartels has long been a matter of controversy. That the simpler forms of international agreements eliminate many of the evils of unrestricted competition and are, therefore, socially desirable, is generally admitted. Opinion differs however in regard to the economic desirability of the higher forms of cartels which attempt to exert a more far-reaching regulation of the market through price, output and marketing restrictions. This type of cartel will be judged in this chapter, not by a few of its activities or policies but by its general effect upon economic life in all its ramifications. This will include the effects upon prices, upon consumers and wage earners, and finally upon technical efficiency or rationalization. Upon the basis of the conclusions reached it will be possible to form a provisional judgement of the utility or disutility of the cartel institution to modern economic society.

Prices

It is important when discussing the effects of cartels upon prices, to make a clear distinction at the beginning between inter-

national and national cartels. While it has been demonstrated fairly conclusively by the German Institute for Cyclical Research that the latter may exercise an appreciable effect upon the stability of domestic prices,¹ no such evidence concerning international cartels has yet been collated. At first sight from the two premises (1) unrestricted competition increases price fluctuations, and (2) international cartels tend to eliminate unrestricted competition, it is difficult to avoid the seemingly evident conclusion that international cartels must eliminate price fluctuations. A statistical test however shows the syllogism to contain less truth than the protagonists of international cartels would have us believe. The flaw is evidently not contained in the premises whose truth has been historically demonstrated but in the necessary divergence between the practice and theory of anything in which human relations play a part. The following empirical analysis will therefore concern itself with the operations of three representative international cartels insofar as they affect price stability, and with a comparative study of several free and controlled prices from 1926 until the present day. Only in this way will a trustworthy conclusion be reached as the purely theoretical studies undertaken to date appear to have departed too far from the implications of practical economic life. The international copper cartel with its rather notorious results will be considered first.

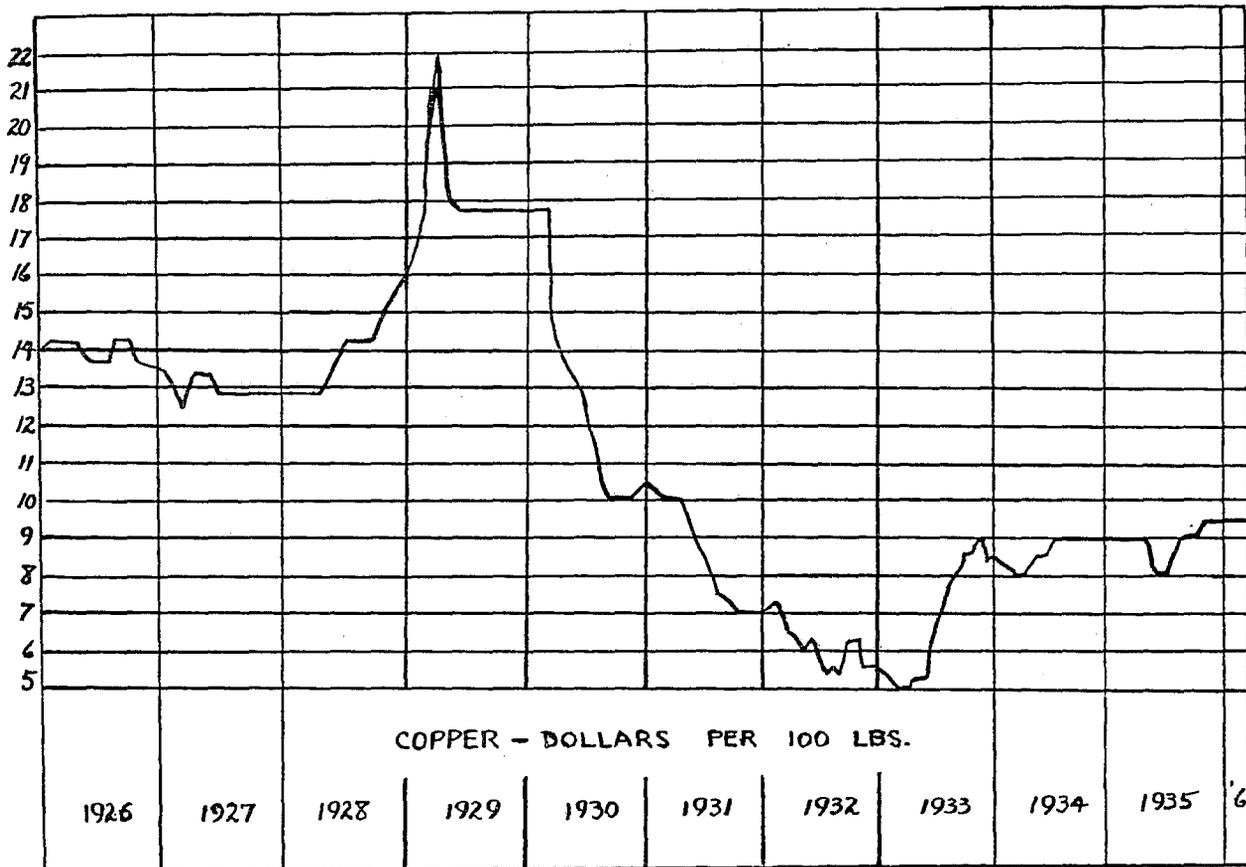
Resulting from the enormous post war fluctuations in copper

¹ Cartel prices showed a range of fluctuation between prosperity and depression only 1/5 that of free goods and 1/8 that of sensitive commodities (agricultural products). Quoted in Burn, op. cit., p. 184.

prices, the Copper Trading Export Company was formed in 1926, embracing thirty-two of the leading copper producing undertakings which, among them, controlled over 90 per cent. of the world production of copper. For convenience the members of the Entente may be divided into four main groups. (a) The Anaconda Copper Mining Company - i.e. the Rockefeller-Ryan group with the companies it controls, (b) The Kennecott Copper Corporation and the American Smelting and Refining Company, i.e. the Morgan-Guggenheim group which is closely allied to the (c) Phelps-Dodge-Nicholls group, (d) The non-American producers including The Rio-Tinto Company, the Union Minière du Haut Katanga, The Chili Copper Company, The Green Cananea Copper Company, Mansfield's Joint Stock Mining Company, The Metallgesellschaft and Aron Hirsch and Sons. The cartel had three main objects, the regulation of trade, the elimination of middlemen and their speculative activities, and the stabilization of copper prices. It is with the third of these that we are particularly concerned at this point.

It can be seen from the chart on the following page that shortly after the formation of the cartel world copper prices fell from 14.4 cents per pound to 12.25 cents per pound. This was due probably to the large accumulation of stocks on hand when the cartel was organized.¹ Soon, however, the price began to rise and upon reaching 12.9 cents remained stable for a twelve month period. A tremendous advance in prices then took place "brought about by the period of intense activity which occurred in the United States during the whole

¹. See chart on p. 61.



of the first part of 1929." ¹. From \$14.75 per 100 pounds in September 1928, the price had risen to 18 cents a pound by February of the next year and to 22 cents a month later. This figure was only maintained for a short time and the price soon fell to its former level of 17.78 cents. Meantime the boom was dissolving rapidly into depression and in April, 1930 the cartel was forced to abandon its attempt to "peg" prices. ². Falling rapidly they reached 10 cents per pound in September 1930,

¹. League of Nations - Review of the Economic Aspects of Several International Industrial Agreements (1930) p. 21.

². League of Nations Report - The Course and Phases of the World Economic Depression, (1931) p. 136.

7 cents a year later and by the end of 1932 the price, after fluctuating wildly had fallen to the new low level of 5.36 cents per pound. By December, 1933 it was back to 8.36 cents and in June, 1934 a twelve month period of a rigid 9 cents per pound price level set in. The latest quotation available, that for February, 1936, shows little change, the price resting at 9.5 cents per pound.

From this evidence what can be said of the attempts of the international copper cartel to stabilize the world price of copper? Recognizing that price stability does not necessarily imply price rigidity, we are able to discern two fairly long periods of relative stability each of which was followed by an enormous and disorganizing fluctuation. Of the latter it seems safe to say that the cartel did not approve either of the rise which took place on April, 1929 or the fall a year later but was unable to prevent either one.¹ With a ninety per cent. control of the market only two explanations appear conceivable. Either the cartel institution is fundamentally unable by its very nature to impart stability to prices, or the international copper cartel pursued an unwise, unscientific policy out of touch with the realities of the economic system as a whole. It is impossible thus far to consider the first of these alternatives. The second appears to contain a large element of truth. While nominally attempting to control prices, the cartel did so without any direct restriction of the output of its members. This enabled and even encouraged increases in the volume and velocity of production among the members of the cartel

¹. Review of the Economic Aspects of Several International Industrial Agreements - p. 22.

whenever the price was fixed at anything like a generous level from the producer's viewpoint. No cartel, even one of international proportions, can withstand such an attack upon prices from rapidly accumulating stocks of the cartellized product. A glut accompanied by a collapse is highly probable, if not inevitable, sooner or later. This appears to have been the case with copper. Not able to withstand the onslaught of the greatly increased demand of March, 1929, Copper Exporters Incorporated (of the United States) substantially increased its quotation,¹ prices rose to 22 cents per pound and the cartel was left open to the charge of undoubtedly mismanaging the affair "if stabilization and not monopoly profits was their true objective."² Even after the New York stock market crash in September, 1929 the graph shows no break in the 18 cent price level for eleven months, though it must have been clear by this time that the prospects for consumption had completely changed.³ "It was, in fact, clear that the combine had become a mere grasping monopoly, and that, if stabilization in the accepted sense of the term had ever been its true objective, it was so no longer."⁴

During the depression it can be seen that even the drastic reductions of output effected by the cartel failed to have any

¹ Royal Economic Society - Memorandum #17, p. 8.

² Royal Economic Society - Memorandum #24, p. 10.

³ Even without this change in consumption the price of 16 cents per pound was considered as "highly remunerative to any reasonably well conditioned concern", away back in January 1929! Flummer, op. cit., -- 150.

⁴ Royal Economic Society - Memorandum #24, p. 10.

appreciable effect upon prices. As a result, they fluctuated wildly at a very low level and the existence of the cartel itself became endangered. This condition intensified the evil which gave it birth. When protracted negotiations are carried on almost continually in order to prevent the dissolution of a cartel the resulting insecurity greatly increases price fluctuations. For instance, the failure of the Copper Conference in New York in December, 1932 "resulted in a sharp downward movement in quotations on Monday".¹ It took some days to recover from this slump. Again, in the Economist of June 22, 1935 (p. 1421) we read - "The copper market experienced another heavy setback during the past week. At one time the price almost touched the £30 mark and it was almost 25 below this year's highest point. The slump of this week followed two very important American copper meetings."

Keeping in mind the fallacy of post hoc ergo propter hoc it is thus possible to trace the cartel's inability to stabilize the world price of copper not necessarily to any flaw in the organization itself but to the way in which it was managed. In the face of a rising demand it pursued an unwarranted high price policy through which the price increased to a much greater extent than the cyclical trend. As a result the production of copper, especially on the part of non-affiliated mines, was greatly stimulated and an excess supply glutted the market (see chart 1). Consequently when demand suddenly fell off early in 1929 prices broke sharply and the cartel was forced to cease all attempts at stabilization and to endeavour to promote recovery by the absorption of

¹. Economist - December 17, 1932. p. 1173.

stocks. A glance at chart 2 will illustrate the cartel's inability to achieve its aims in this direction also. These unsuccessful attempts reacted unfavourably upon the unity of the cartel and, as a result, prices appear to have fluctuated even more widely than would have been the case under more strictly competitive conditions.

CHART 1.

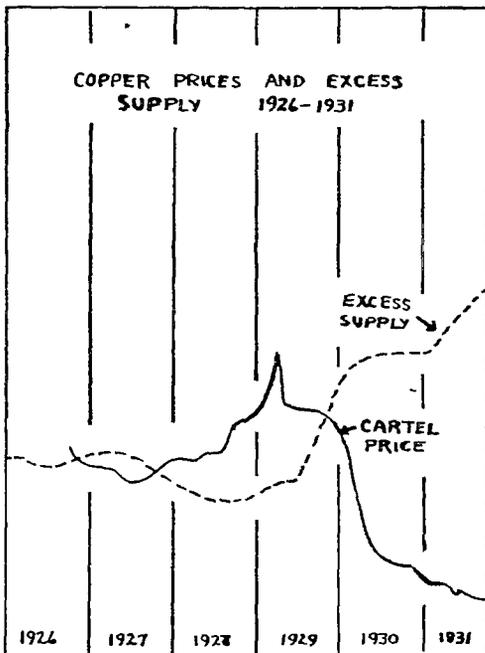
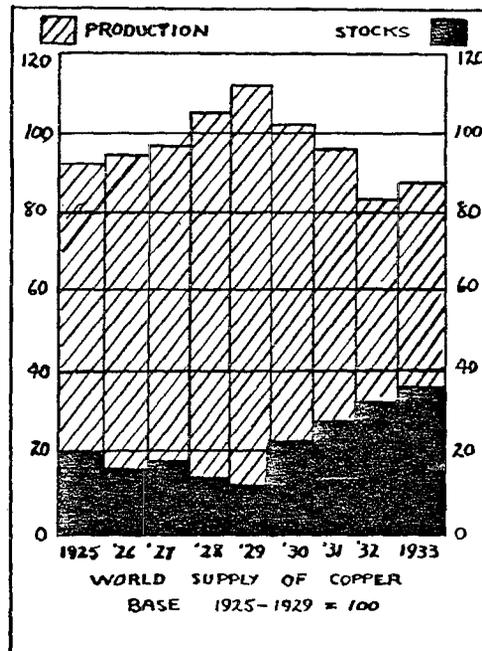


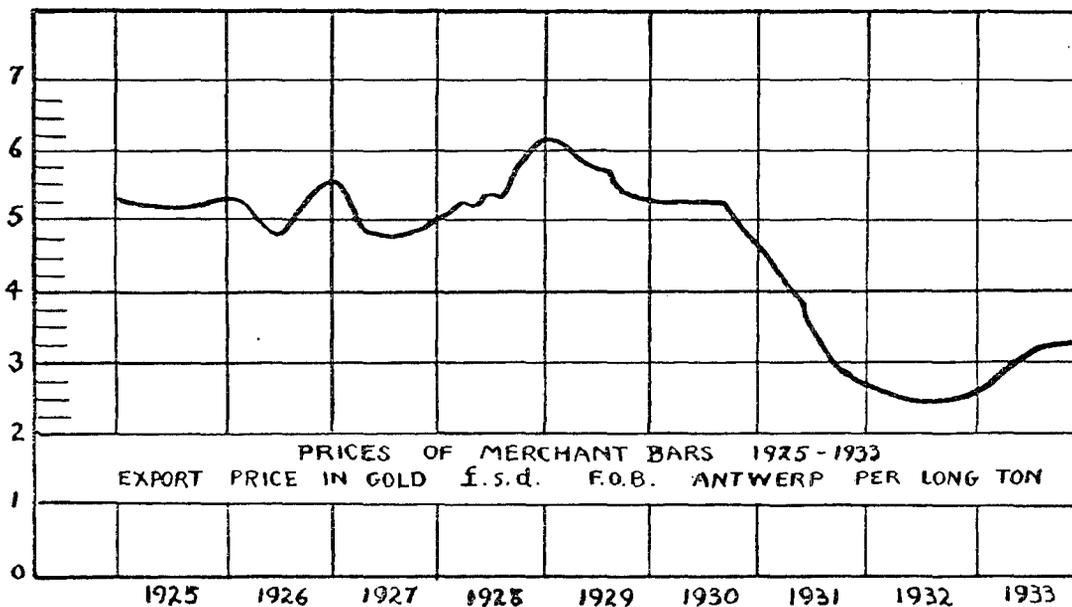
CHART 2.



When weighing this conclusion it should be kept in mind that if the price and output policy had been wise, that is, if monopoly profits had not been the aim, and if price control had not been considered apart from direct output control, the possibility would have been opened up of the cartel exerting a stabilizing influence upon prices. Whether or not this possibility would have been realized is a question that can best be answered after the experience of two other modern and representative cartels has been analyzed. If the answer be negative the prime justification for the existence of international

cartels falls to the ground.

Due to the vast amount of literature extant upon the organization and set up of the International Steel Agreement (hereafter referred to as the E.I.A.) consideration will only be given to the effects of that agreement upon the prices of metallurgical products. It should be noted that since it was not the object of the cartel to fix the prices of metal products, it could not exercise any direct and decisive influence upon them. The object was rather to discipline the steel market by regulating production so as indirectly to check excessive fluctuations in prices. The cartel may thus be described, to use M. Herriot's phrase, as "a cartel of production, not of price".¹ Sufficient background is given in the statement that the cartel arose as a practical answer to the same conditions that gave birth to the international copper agreement, namely, sharp variations in the prices and stocks of the product to be cartellized.



¹ Herriot, op. cit., p. 142.

It is seen from the above graph¹ that the prices of merchant bars (a good index to the general price level of all metallurgical products) from September, 1926, until the end of 1929 moved slowly according to the general position of the market but without any sudden changes. For the next year, exceptional stability may be noticed around the price of £5, 5s per long ton. Here a decline set in and by June, 1931 the price had dropped to £3, 7s and to £2, 4s, 6d a year later. In June, 1933 it was back to £3 and by the end of the year to £3, 2s, 6d. What is the relation of this information to price stabilization and cartels?

In the first place from 1926 to 1929 the policy of merely exerting an indirect influence upon world prices may be said to have been fairly successful. Secondly, the stable period from October, 1929 until June, 1930 is to be explained by the developing world crisis in the metal market at that time and the entente's reply to that test by the substitution of a direct policy of price control for the original quota production plan. The results of this plan are seldom emphasized sufficiently to show the degree of price stability that an international cartel may achieve for very short periods of time. During the six month period prices were undoubtedly more stable than would have been the case under fully competitive conditions and therefore it is impossible not to agree that the E.I.A. was successful during those months. Considering the general position of the market at that time,

¹. Prices adapted from London and Cambridge Economic Survey - Special Memorandum #39, p. 50, and League of Nations - "Review of the Economic Aspects of Several International Industrial Agreements" - p. 15.

however, the success seems to have been in the direction of a rigid rather than of a stable price level. This would automatically render the continued adherence of the members impossible and would account for the impossibility of renewing the agreement on the date of its expiration in August, 1930. This theory also fits in with what we know of the sharply dropping prices and the "intolerable situation" that set in after the renewal became impossible. It also invalidates the argument sometimes put forth that the collapse of the cartel was not due to any inherent flaw in its structure but to the blocking of international agreement by national discord, as the latter was a direct outcome of the former, in this case at least. That this lack of cooperation was not merely a slight and short-lived obstacle in the path of the cartel is evident in the later history of the organization. Once the joint sale schemes to influence prices had failed the prestige of the cartel became undermined and it has not yet recovered its former control. In the past few years there has been practically no attempt to enforce its provisions and all efforts to render it more effective have failed.

The experience of the European Steel Cartel thus enables the conclusion to be drawn that no real degree of price stability can be imparted by any cartel that does not exhibit the strength that arises from unity of purpose and method. In other words, an international price cartel, to be successful, must be composed of members, each of which exhibits a high degree of control in its own country or customs area. It also tentatively shows, in general, the inadequacy of the whole cartel institution as a means towards the solution of the

price stabilization problem in modern industry. How far this conclusion is borne out by the experience of a representative international cartel in another field, that of chemicals, will now be considered.

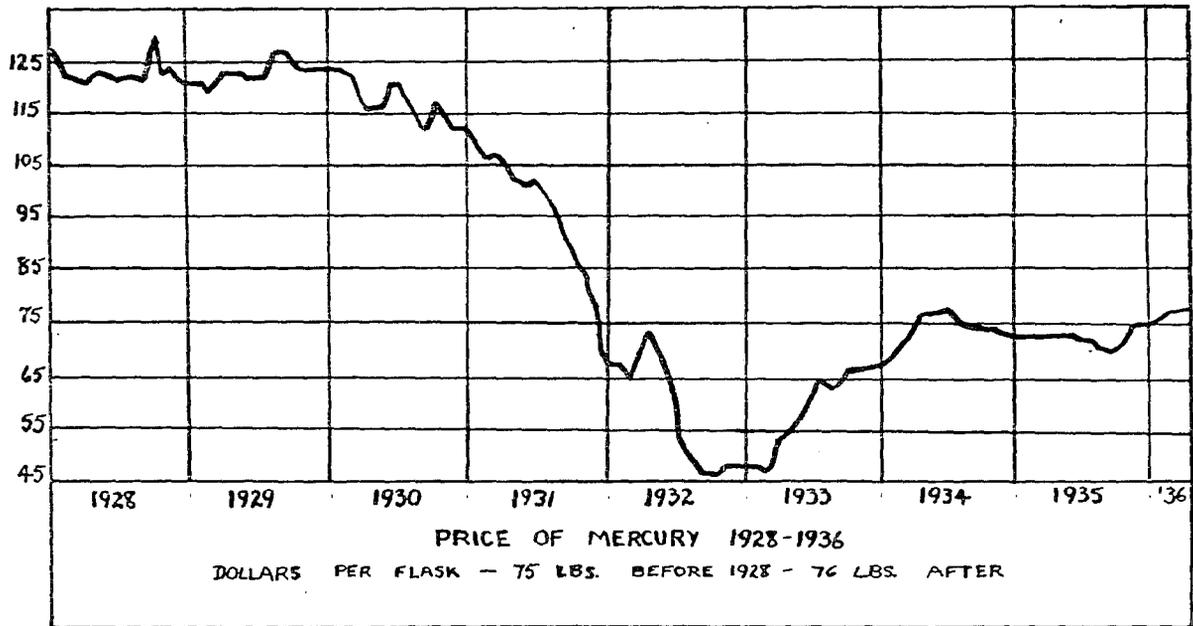
Wide price fluctuations and fierce competition aided by State interest and assistance culminated in 1928 in the formation of an international mercury cartel known as the European Mercury Consortium. To fix and stabilize prices ranks first among the objects assigned to itself by the cartel and as it enjoys almost a complete world monopoly,¹ all factors necessary for a direct control of world mercury prices are embodied in its constitution. The results achieved by the cartel, if any, for that reason carry an added weight.

From the price statistics presented by an official League of Nations report it would appear that the cartel has been successful in its policy of stabilizing prices, that "the mercury market may be regarded as finally regulated and controlled."² Unfortunately however the statistics presented in the report extend only to the year 1929, that is, two years after the formation of the cartel. Up to that time the conclusion appeared justified that the cartel was succeeding in stabilizing the wildly fluctuating mercury prices, as it had fixed an official price of mercury below that which was actually obtaining in the market and was securing results from such a far-sighted action.

After 1929, however, as can readily be seen from the accompanying chart, the price of mercury dropped from \$124. per 76 pound flask to \$67. at the end of 1931, and to \$49. at the end of 1932.

¹•The Spanish, Italian and Mexican firms, members of the Consortium control between them about 83 per cent. of the world output.

²•Review of the Economic Aspects of Several International Industrial Agreements - p. 31.



This was only slightly more than one third of the price obtaining three years before and a much lower price than market conditions warranted.

What is more, the change in price during those three years was comparable with the widest fluctuations before 1928 (see chart 1) and this was the

YEAR	Minimum Price			Maximum Price		
	£.	s.	d.	£.	s.	d.
1919	16	0	0	24	10	0
1920	14	0	0	27	0	0
1921	9	10	0	12	15	0
1922	10	7	6	13	7	6
1923	8	15	0	12	10	0
1924	9	15	0	14	15	0
1925	13	2	6	15	0	0
1926	14	0	0	17	5	0
1927	17	0	0	23	15	0
1928	22	0	0	25	10	0
1929	22	0	0	23	5	0

CHART 1.

MINIMUM AND MAXIMUM PRICES OF
MERCURY IN LONDON 1919-1929.¹

condition that the Consortium was reputed to have "finally regulated and controlled".¹ Certainly the cartel cannot be said to have stabilized the world price of mercury in the face of the world economic depression, unless, of course, attention is focussed upon the relatively unimportant day to

day fluctuations and the wider changes allowed to escape a critical gaze. It should be noted however that a relatively unchanged price has obtained

¹ Review of the Economic Aspects of Several International Industrial Agreements - p. 30.

from April, 1934 until February, 1936. Whether this has been due to the operations of the cartel or would have obtained under freely competitive conditions cannot be ascertained with any degree of assurance but it would appear from a comparison of the graph of those two years with any good index of general business activity,¹ that there would have been little change, outside of day by day fluctuations, if the Consortium had not been in operation.

The general conclusion is now evident. With the exception of the year following its formation, the European Mercury Consortium has not been successful in stabilizing the world price of mercury even with an 83 per cent. share of the total output of that commodity.

Having considered the effects of three important European and World cartels upon prices we will pass to the final means of determining whether cartellization exerts an appreciable effect upon price stability, that is, to a comparison of the price schedules of several cartellized and non-cartellized commodities in the same industrial groups. While it is not possible to draw any definite conclusion from such a comparison due to the necessarily important differences between any two industries, yet the results achieved may be of some aid in supplementing those already at hand.

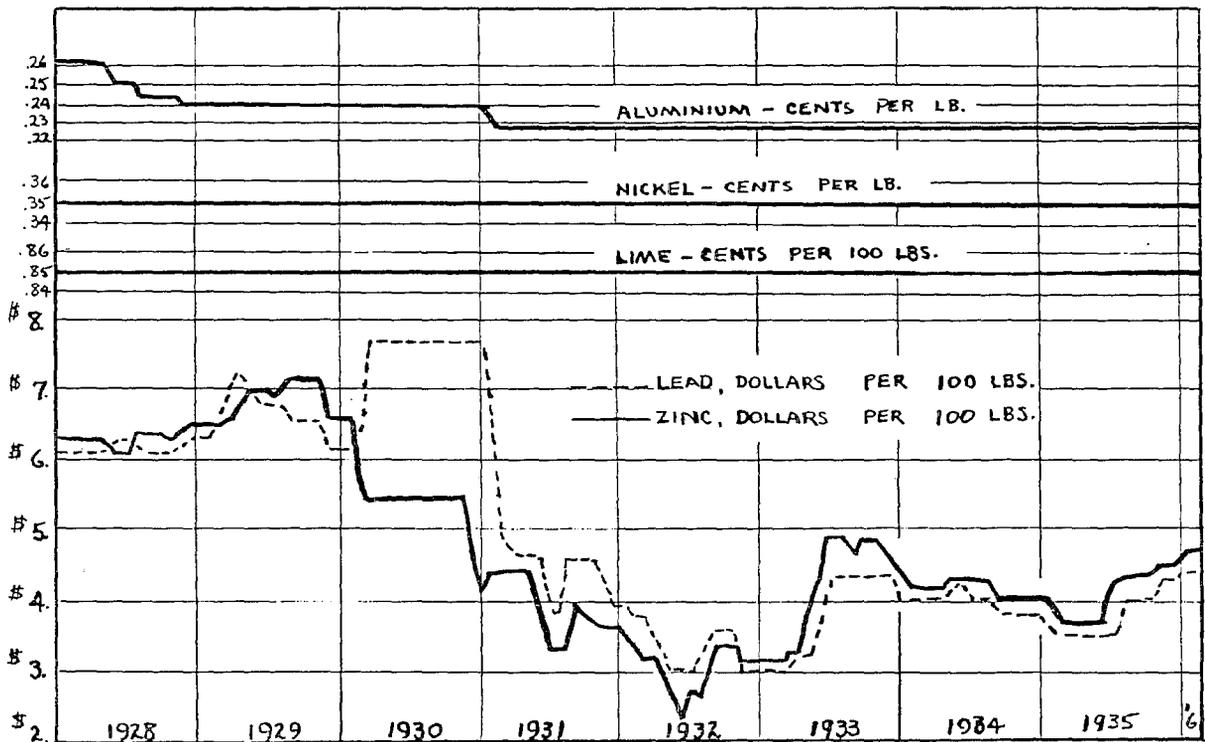
Two series of price statistics for eleven commodities have been secured. It has been possible in the first series to obtain prices for each month from 1927 to 1936,² in the second, the average price for each year from 1924 to 1933.³ The conclusions arrived at from those of the first group will of course be much more authoritative than those of

¹•Such as those in the January, 1936, letter of the Canadian Bank of Nova Scotia.

²•Industrial and Engineering Chemistry. Vols. 18-28.

³•
Statistical Year Book of the League of Nations 1933-34.

the second as the latter will merely show the year to year movements of prices whereas the former will portray month to month fluctuations. The following chart contains the price movements, month by month, of Aluminium, nickel, lime, zinc and lead, that is, the commodities of the first group. The first three of these are undoubtedly controlled prices whereas zinc and lead may be considered as substantially free.



The above graph speaks for itself with more clarity and decision than any exhaustive analysis could possibly do. The obvious price rigidity of aluminium, nickel and lime however, tends to invalidate the conclusions reached in our study of mercury, steel and copper, and therefore a word of explanation is necessary. Although the three commodities are undoubtedly controlled, aluminium is the only one of the three organized as a bona fide cartel, nickel and lime being, in reality international trusts.¹ These were included in the chart to show the

¹.An excellent account of the nickel trust is to be found in - Southard - American Industry in Europe - pp. 91-92.

reality of price control in modern industry, but should be disregarded when considering the effects of international cartels upon prices. The European Aluminium Cartel, however, has succeeded in maintaining a remarkable degree of stability in aluminium prices, the price of \$22.90 per hundred pounds having remained unchanged for the past five years, i.e., from February 1931 until February 1936. This is to be explained in the first place, by the stability of the cartel itself. Each of the member concerns in Germany, Switzerland, France, Britain, Italy, Austria, Norway and Canada enjoys a high degree of organization and control in its respective country. Secondly, the cartel has maintained a close, and so far successful control over production and marketing,¹ and finally, it has pursued a wisely tempered price policy. A combination of these three factors has produced an enviable stability of aluminium prices over a period of time nearly a decade in length. It has proved an undeniable and worthy exception to the tendency discerned earlier in the chapter.

YEAR	WOOL	RAW SILK	FLAX	JUTE	CELLULOSE	BASIC SLAG
1924		80.07				60
1925	6.67	72.74			282.71	66
1926	5.79	69.89			297.65	77
1927	5.79	64.50			278.51	71
1928	4.40	59.82			266.76	63
1929	3.01	55.82	205	31	260.61	53
1930	2.17	35.61	141	53	234.46	53
1931	1.66	25.54	86	39	205.99	49
1932	1.99	18.66	78	30	130.91	57
1933		15.67	91	26		36

The above chart contains the average yearly prices as far as they were obtainable, of the second group of commodities that is, wool, raw silk, flax, jute, cellulose and basic slag. The prices of cellulose and basic slag are subject to cartel control whereas the other four may be regarded as essentially free. From these figures it is possible to obtain the per centage of price change of any

¹ Review of the Economic Aspects of Several International Industrial Agreements. p. 27.

commodity for any year, and from that the percentage of fluctuation in price during the whole period for which figures are available. The results are very enlightening. While the average yearly change in price over the whole period for the "free" commodities, wool, silk, flax and jute was respectively 13.7%, 14.4%, 29-13%, and 30%, that of the controlled articles, cellulose and slag was only 11% and 10.6%. This would clearly indicate the stabilizing influence of international cartels upon prices, but a word of caution should be introduced when interpreting the figures as a definite tendency or proof towards this end.

In the first place no two industries are comparable for our purpose unless a minute investigation is undertaken in regard to the nature of their product and its cost, the relative efficiency of their management and methods and other similar conditions. Without such a study any results obtained must be regarded as purely the expression of a tendency and not as a direct proof and must be used in conjunction with other facts already at hand. In the second place, the terms "free" and "controlled" with reference to prices are merely terms which indicate differences of degree, differences which in some cases may be very slight due to the secrecy which surrounds most modern price agreements. Thirdly, the fallacy of post hoc ergo propter hoc is always prominent in discussions of this kind. It is impossible to state definitely whether or not the relative stability of the pieces of cellulose and Thomas slag is due to cartellization. Other preceding factors such as changes in the price of raw materials, in wages, in technology or in the interest on capital may have exercised a profound influence upon the result. It is to be hoped that in the near future an exhaustive study of prices and cartels is undertaken covering hundreds of commodities and taking into consideration all of the above circumstances. Only

when that is done will it be possible to state definitely the exact degree of control over prices that may be expected from a "normal" international cartel. However certain conclusions have been reached from the investigation in this thesis and will be summarized briefly at this point.

Granting certain premises, international cartels may exercise a stabilizing influence upon prices in proportion to the sphere of influence that the cartel embraces. Disregarding, for a moment, the cost at which this has been achieved, the following premises necessary for the attainment of any valid conclusion should be noted. (1) The cartel itself must maintain a high degree of stability and embody the confidence of its members before any control is possible. As was evidenced by the European Steel Entente, this also implies the exercise of a high degree of control by each member over its own country or customs area. It is possible to make this assumption fairly in the case of many important international cartels now in existence, such as the European Aluminium Cartel, the European Mercury Consortium, the France-German Potash agreement, the International Bone-Glue Manufacturers, the International Linoleum Trust and the Incandescent Electric Lamp Cartel. It should be kept in mind, however, that not all of these cartels aim at direct price regulation. It is not possible to make such an assumption in the case of aniline dyes, artificial silk and the zinc and lead cartels.

(2) Stability of prices usually involves a sacrifice on the part of a few individual consumers or producers. This cannot serve as an argument against the attempt to stabilize economic life on a broad basis, if the stabilization takes place in the price sphere which has been defined as "controlled", and does not enter into the high

or monopolistic division.

(3) The initial price rise following the formation of many international cartels must not be denounced as a monopolistic tendency. This is oftendone and fails to take into account the fact that before the organization of the cartel, prices may have been, and indeed probably were, at a ruinously low level which was the direct cause for the emergence of the agreement.

(4) It is necessary to assume that an enlightened and wise policy guides the destiny of the cartel if price stabilization is to be secured. An ill-informed policy is likely to intensify rather than minimize price fluctuations.

(5) The combination of favourable circumstances necessary before price stabilization can be effected occurs only in a small minority of cases. This minority is to be found largely among raw material cartels whose influence upon the course of the business cycle may be of particular importance. Hence arises the general economic significance of successful cases of stabilization, no matter how few in number they may be.

(6) The conclusion that international cartels can, and do, in a few cases at least, exert a definite influence upon prices is not of great importance unless it is supplemented by an analysis of how far and in what direction the use of this power is likely to affect the well being of consumers and wage earners and the general problem of rationalization. That is, it is necessary to determine what price economic society is paying for the benefits of some degree of stabilization. This overlaps to some extent into the general problem and will be considered at this point.

Consumers and Wage Earners.

The whole question of the effects of international cartels upon consumers seems to revolve around the result obtained from the balancing of two forces, on the one hand, the strength of the consumers' defences against exploitation, and on the other, the desire and ability of the cartel to exploit. On the side of the consumer are two factors whose strength varies enormously from one set of circumstances to another. In the first place the elasticity of his demand, if high, will enable him, when production is carried on under the tendency of constant or increasing returns, effectively to demand from the cartel a low price policy, for without such a policy the producer would not gain the advantages of producing on a very large scale for an expanding market.

A large "fringe" of non-combined producers is a powerful aid under certain circumstances to this elastic barricade of consumer defense. If they, as producers, consider that the prices charged by the cartel are exorbitant they may, in theory (and occasionally in practice) take steps to set up competing plants outside the cartel. On the whole, however, this power appears to have been grossly exaggerated in most published reports to date. Dr. Plummer has well described the situation as it really exists.

"It is, indeed, a profound mistake to think that potential competitors are always on the qui vive ready to spring upon the flanks of a combine immediately it begins to exploit the consumer. An international combine, may, quite conceivably, control the principal supplies of essential raw materials, or, by the acquisition of patents and subsequent research work, it may have gained a considerable technical lead

against which would-be competitors will generally find it extremely difficult, if not impossible, to contend. Again, the economic and technical conditions of the industry may so imperatively demand production on a large scale that none but large undertakings, equipped and organized at least as effectively as the combine, can hope to make headway against it. Thus it becomes clear that powerful monopolistic combines will be seriously threatened by competition only (a) if the chances of successful competition and high profits are good, and not likely to be merely temporary; and (b) if sufficient capital (plant, equipment, cash etc.) can be brought together by the potential competitors in sufficiently large, well-managed units; and (c) if the combine is not already in exclusive possession of some essential or essentials of the industry." ¹.

The length of this quotation is justified by the clarity with which the point at issue is correctly described. The conclusion is evident. Only in a few, very rare cases may the consumer expect to be protected against a monopolistic price level by the possible existence of competitive producers.

The "competition of substitutes" however, is another question. A fair price for the producer, resulting from restriction of supply may be a price higher than the consumer is willing to pay and sooner or later he will seek ways and means of obtaining a simple substitute. This really constitutes a way by which the elasticity of his demand may be increased, and is, on the whole, less likely to be suppressed or

¹. Plummer - op. cit., pp. 145-146.

hampered by a cartel than the more direct method of competition outlined above. With the rapid advance of technical and scientific knowledge low priced substitutes for commercial articles and raw materials are being discovered with a rapidity that promises a fair degree of protection to the consumer from this source. Take for example, the three distinct means by which nitrogenous fertilizers can be obtained, the invention of synthetic camphor¹ and the development of synthetic rubber now taking place on a commercial scale in Russia. Of course the possibility exists that the cartel itself will discover and exploit the substitute. This must be taken into consideration but at least it may be said that international cartels are not in a position to force new inventions off the market with the apparent ease that has characterized the historical development of huge international trusts.

A further factor reduces the probability that consumers will be exploited by international cartel activities. Even if outsiders can be prevented from invading the market and if a highly inelastic demand be coupled with a lack of available substitutes so that no protection from high prices exists in this direction, yet the cartel members' own capacities will be gradually extended as a result of the tendency of almost all industries to reinvest profits, a tendency often intensified in cartellized industries by the struggle for larger production or sales quotas. This expansion forces the cartel to work for price reductions with the view of increasing the volume of sales so as not to be dissolved through the expansive tendencies of its own members.

¹. Discovered when Japan curtailed production of the natural product. Robinson, C. H. - "Overproduction and Recent Efforts towards its Control" - Journal of the Canadian Banker's Association - October 1931 - p. 93.

Although prominent in all cartels this tendency may be most clearly seen at work in quota-fixing agreements which provide a compensation for the works closed down or unable to fill their quotas. Here prices must be kept low in order to reduce the number of works that must be compensated and to distribute the burden over as large a number of works as possible. If this policy were not followed, the profits derived from price raises would be "consumed" by the unreasonably high cost of the compensation. Evidently consumers may expect a high degree of protection from such expansive tendencies.

Against the power exercised on behalf of the consumer it is necessary to weigh that wielded by cartels. As we have seen, the limitations upon their actions arise chiefly from their lack of stability over any considerable period of time and by the refusal of competition to disappear entirely at the time of their inception. The strength of this latter possibility is clearly seen in the number of large international cartels of recent years that have been unable to count the United States as a member. Although the international zinc cartel, for example, controls over 85 per cent. of European production, it always has to bear in mind the capacity of the American producers who are able to compete from behind their high tariff walls. With such a group of potential competitors it is impossible for the cartel to raise prices much above the competitive level without inviting competition. Obviously the larger the productive capacity of these non-cartel producers, taken as a whole, the more powerful will be the check upon the exercise of price control by the entente. But even if the percentage of their output is relatively small, their existence may exert a restraining influence upon the cartel if they are able to increase their output considerably for a short period at a

particular time. This was clearly evidenced between May, 1929 and April, 1930 when the international copper cartel set the world price of copper at 18 cents per pound, a price undoubtedly in the monopolistic class and which called into operation "many mines which had been idle for years and were not parties to the cartel with the consequence that production was increased out of all reason." ¹. Thus the production of copper in Northern Rhodesia increased from 9070 metric tons in 1931 to 105,876 tons in 1933.² Although, due to the continued high price policy of the cartel, an accumulation of stocks took the place, for a time, of the lower price to the consumer, yet the same accumulation made a break in the price inevitable in time. It constitutes a classic example of the power wielded by a few small producers to bring monopolistic conditions into line with a competitive price level.

As each of the conditions mentioned above on either side of the balance is either a highly variable entity or theoretical concept, it is impossible to say with any degree of precision just how far consumers have been "exploited" by prices higher for cartellized products than those obtaining in more competitive industries. When prices were under consideration attention was focussed almost exclusively on the problem of stabilization and little was said regarding the ability of an international cartel to raise and maintain prices above a competitive level. This was due to three factors (1) the impossibility of determining whether or not a cartel was the only reason behind a price change; (2) the impossibility of actually determining, once the cartel had

¹ League of Nations - General Report on the Economic Aspects of International Industrial Agreements (1931) p. 24. See also, chart on p. 6/ supra.

² League of Nations - World Economic Survey 1933-34, p. 110.

been formed, whether expenses of production had actually risen or fallen as a result of its formation. (3) The negative answer given to the problem of stabilization which in itself would indicate clearly the limits upon possible international price raises.

Certain theoretical considerations however may be introduced at this point. In general the price set by the international cartel will be such as to cover its high-cost members' expenses of production, or, more accurately, it will be such as to allow those members sufficient profit to induce them to join the cartel. That this is precisely the case under competitive conditions does not alter the argument. While cartels are theoretically able to raise unreasonably low prices and to maintain them at a level guaranteeing the marginal producers a profit margin, it seems highly improbable that they can do more, as a rule, than to remove cut prices and cutthroat competition in their trades. If they did more they would ultimately cause an increase in production and supply on the part of members and outsiders alike and the price would ultimately fall.

It thus appears that if consumers as a whole have suffered from the development of international cartels, it lies in other fields than those directly under consideration. This statement, of course, is qualified by the existence of inevitable exceptions but the tendency is clear; the consumer may be said to gain as much from the stabilization of prices in certain fields as he loses by the monopolistic exploitation of favourable demand conditions in others. Undoubtedly an increase in publicity will alter the situation in the near future but at present it may be described, on the whole, as one of an uninformed and prejudiced consumer struggling strenuously against a selfish and undisciplined producer. In the field of inter-

national cartels, the results to date appear no more favourable to one group than to the other. It is to be hoped however that the future holds the key to the cessation of the struggle in order to prevent the sacrifice of genuine rationalization to schemes for restriction of supply and maintenance of monopolistic price levels, which, though not always successful, are slowly tightening the chains of revolt about the neck of capitalist enterprise.

Labour.

With regard to wage earners the effects of international cartellization may be more clearly stated as the results obtained in this field permit of more precise formulation. The problem is to analyze the probable effects upon earnings of labour by the continued cartellization of an industry. There are four possible fields in which the causes of diminished, or increased, earning power may be at work, i.e., in the field of direct wages, of rationalization, of trade union activities, and finally, in the field of consumption, i.e., the extent to which wage-earners buy goods produced by international cartels¹. and the price level of the latter relative to competitive conditions. Of these four, the last has been considered above under the general heading of "consumers". It will be advantageous to consider each of the other three in turn.

(1) A progressive deterioration of wages and living conditions is highly improbable under a cartellized industrial system. The brunt of a price war usually falls upon the workpeople because independent,

¹."According to inquiries conducted by the German Federal Statistical Office for the years 1927 and 1928, a working class family with an annual budget of 3250 marks spends a proportion of approx. 7% of it on goods subject to price fixing agreements. I.L.O. study - "The Aspects of Rationalization (1931) p. 185. At that time there were 1500 cartels in Germany. To-day there are well over 2100. World Economic Survey 1933-34. p. 71.

competing producers, forced to reduce prices generally seek to reduce their costs by reducing wages. This may or may not begin by cutting costs in other directions, but almost invariably wage-reductions will occupy a prominent place in the list of "economies" to be made. By eliminating to a large degree this anarchic competition, international cartels eliminate a paramount cause of wage reductions. On the positive side they provide their members automatically with an increase in profits and thus place labour in a position to demand its share in the form of higher wages. The statistical evidence necessary as a means of illustrating to what extent this tendency has been operative has not been forthcoming but it probably played a prominent part in post war labour relations from 1923 to 1930. From that date until the present, the continued force of the depression has demanded the most stringent economies from all enterprises including international cartels and it is to be doubted whether, in the field of wages, the existence of international cartels has proved beneficial to any marked degree. Experience seems to show, at any rate, the need for moderation in statements such as that of Dr. Burn, "the sweatshop and starvation wages are unknown in cartelized industries owing to the absence of unrestricted competition." ¹.

(2) In the field of rationalization, cartels and labour are inextricably bound together. First, cartels undoubtedly restrict output, and in proportion, unemployment must necessarily follow. Secondly, cartels secure alleged improvements in organization and technique and, as a result, unemployment may follow. A study of several international cartels tends to the conclusion, however, that the extent of internal rationalization in the cartel movement has been grossly exaggerated.

¹. Op. cit., p. 138.

While theoretically possible, such have been practically impossible to any great extent, due, first to the cartel's preoccupation with price maintenance and restriction of production, and secondly, to the temporary and unstable character of nearly all cartels in the international field.¹ Regarding output restriction, however, there is a real danger of unemployment, as a sine qua non of nearly every modern cartel, national or international, is limitation of production. Of course, the workers who remain in the employ of the cartel will suffer less from under or over-employment due to the irregularities of production and marketing, than they did before the cartel came upon the scene, but many are undoubtedly forced to seek employment in other fields. This condition, however, it should be noted, is more economically justifiable than that which the cartel displaced insofar as this result is obtained. The flaw is obviously to be found in the field of distribution and for that reason the blame for displaced labour units should be laid there rather than upon the economic consequences of international cartellization.

(3) Regarding trade union activities several conflicting considerations merit attention. In the first place, the frequent allegation that labour organizations may find it more difficult to enforce their demands against a cartellized industry than against private employers seems to be based on a false concept as to what actually constitutes the chief barrier against trade union progress. It has been a remarkable phenomenon of recent publications on this subject that the actual strength of employers has been repeatedly emphasized while their mentality has been consistently neglected.² The error of this interpretation is to be found in an official statement of the American

¹ See also pp. 97-98 infra.

² For example, see Hirsch, - "National and International Monopolies from the Point of View of Labour, the Consuming Public and Rationalization" League of Nations Report - p. 18.

Federation of Labour. "As the vision and understanding of the employer change, his attitude toward his workmen and the relations between employers and workers also change, so that the sentiments and views of employers are often in entire accord with those of the organizations of working people".¹ Thus the basis is established that it is the attitude, and not the strength of employers that should be the principal focus of attention when trade unions and cartels are under investigation. The fact is then of the utmost importance that "entrepreneurs who are associated with cartels reveal a much better understanding of the problems of wages and labour conditions than is to be found among most unorganized business men."² The reason for this is to be found in the very nature of cartel organization and need not be entered into here. It is sufficient to note that, aided by a certain degree of stability and balance in production, such an attitude may well be said to foster "mutual negotiations" as opposed to "unregulated bargaining". There seems, therefore, to be no valid reason for the assumption so frequently made that international cartels, because of their size, must prove a strong and militant foe to Trade Unionism.

Labour and cartel development are comparable in that they have both advanced far into the international sphere.³ This tends to the conclusion that international stability of working conditions and wages may emerge from the struggle of the two international forces. As in the previous sections of this discussion no statistics can be introduced to prove the existence of such a tendency due to the necessity for a highly technical investigation into international labour conditions which is a subject in itself. Due to the fact however that the

1. Corners, S. - "Policies of the A.F. of L." quoted in Furniss, "Labour Problems" p. 321.

2. Burn, op. cit., p. 169.

3. Approximately one half of the membership of the Trade Unions of the world is affiliated with the one great "International Federation of Trade Unions". Furniss, p. 204.

more completely foreign competition has been removed, the less effectively can the wages demands of the workpeople be met by the familiar argument that foreign competition, actual or potential, makes it impossible to pay more, or imperative to pay less, for fear of undercutting, it may be said that undoubtedly such a tendency exists, and in proportion to its extent, is favourable to labour.

Thus, up to the present, labour may be said to have benefited, in general, from the existence of international cartels. The future is less certain. Even granting an improvement in our process of distribution, the international cartel movement may conceivably constitute a grave menace to workers. At the same time the latter "cannot join in general condemnation of economic developments which tend to eliminate competition, but must rather aim at the public supervision and regulation of monopolistic organizations"¹. Without such a supervision it is highly conceivable that the workers of one country may come to possess a greater sense of harmony and community of interest with the workpeople of other countries than with the employing classes of their own. This has been the case with capital and the indications point to an even more rapid migration from what our society regards as orthodox, in the case of labour.

Rationalization.

Genuine rationalization is a means by which better quality, lower costs, improved conditions of labour and the maintenance of a proper balance between production and consumption should all be secured simultaneously. On the side of the producer it should avoid the waste of raw materials and of energy, simplify the distribution of commodities,

¹I.F.T.U. Pamphlet. "Fighting World Economic Crisis and Unemployment" (1931) pp. 18-19.

liberate it from disastrous competition, ruinous overhead charges and the multiplication of superfluous middlemen. On that of the consumer it should provide a reduction of prices corresponding to lowered costs, and should result in improved working conditions and wages for labour. To be successful, it must, of course, be effected in the international field. This indicates the close connection existing between international cartels and the problem of rationalization.

The beneficial results that international cartels have allegedly brought about in the fields of technology and rationalization appear to have been greatly exaggerated in most published works on the subject. The question is not one as to whether or not these economies actually exist, as a positive answer to that question is generally admitted. The error arises rather in the negative field, i.e., in the disproportionate emphasis placed upon them, an emphasis which does not allow adequate attention to be directed at the limitation or even cancellation of some of these favourable effects by factors likewise inherent in cartel organization. This will indicate the two-fold character of the following analysis.

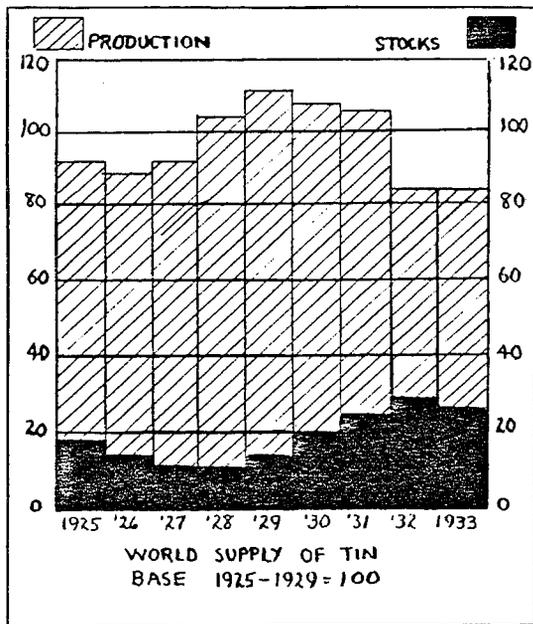
On the positive side international cartels effect a genuine international rationalization of industry in that they extend the size of economic territories¹ by bringing together economic groups that are still divided into hostile camps under the influence of the world war. This tendency has been emphasized in a previous chapter.² Here it remains to note the limited character of the success that has been achieved in this important field. The many political boundaries created by Versailles that still enclose incomplete economic territories is a

¹ The desirability of this tendency was emphasized at the World Economic Conference of 1927.

² See p. 49

factor which continues to create political estrangements in Europe of a very grave character. The present position of Italy in Ethiopia, for example, has, nominally, at least, been attributed to this refusal of nations to recognize that political boundaries by no means imply the same economic frontiers. Thus, while international cartels have in many cases succeeded in crossing political frontiers with beneficial results as far as rationalization is concerned, there still remains a wide field in which they can exert little, if any, control over the economic needs of political nationalities.

Insofar as international cartels enable a general survey of stocks as well as of manufacturing and marketing possibilities to be made, important steps towards rationalization are being taken. It should be emphasized, however, that genuine rationalization precludes any idea of consumer exploitation and therefore any survey of potential supply and demand that results in so-called valuations is an impediment to commerce and may be said to have the general effect of



raising prices to the consumer rather than of rationalization. No better example of this could be cited than the case of tin restriction. Organized by the International Tin Committee in 1931 whose members at that time controlled 87 per cent. of the world production, it effected a reduction in tin ore production from 195,000 metric tons in 1929 to 88,000 in 1933.¹ The greater part of this

¹ Statistical Year Book of League of Nations, 1933-34, p. 139.

decrease took place in 1932 when mine production dropped by about 13 per cent. because of the agreed restriction. Early in 1934 most of the other countries that had formerly remained aloof, joined the scheme, the price of tin meanwhile rising very substantially, i.e., in terms of gold by 66 per cent. between June 1932 and June 1934. Although there is no question that excess stocks of a commodity in relation to effective demand and a consequent price level below production costs is bad for both producers and consumers alike, it is difficult to believe that tin control has not exceeded the limits which would have resulted in a genuine public service and rationalization. To quote the Economist, "Our criticism of the restriction scheme is not that it creates fluctuations but that it keeps the price of tin too high".¹ This is merely a single example of those irrationalizations effected in industry and trade in the name of international cartellization.

In the field of internal economies rationalization encounters the same opposing tendencies, but with a result more favourable to international cartels. As the benefits to be derived from combination are well known, only the more important will be summarized at this point. They result from the reduction of the numbers of redundant patterns and varieties and the exchange of technical and commercial information, from the reduced cost of more effective sales propaganda, (competitive advertising is eliminated) and from a fair division of limited supplies of raw materials which lessens their costs. They also follow upon the interchange of patents and research results, central purchasing offices, standardization of types, grades and sizes, reduced selling costs and cooperative market research.

¹ January 26, 1935 - p. 181.

A few illustrations will tend to show the reality of these internal economies and their beneficial character to consumers and producers alike, i.e., to rationalization. The International Aluminium Cartel has made it possible to reduce the number of representatives and middlemen, and hence the total incidental expenditure connected with the production of aluminium. It has done away with the sales of metal between producing countries, which necessitated the payment of Customs duties and transport charges that were quite unnecessary and sometimes ridiculous, - as, for example, when shipments were proceeding simultaneously in exactly opposite directions. Through a joint propaganda office, the "Bureau international d'études et de propagande pour le développement des emplois de l'aluminium" the cartel collects all information, both technical and commercial, of interest to members of the association ¹. and thus decreases the cost and at the same time increases the effectiveness of aluminium advertising. The European Mercury Consortium also employs itself along these lines, and recently opened a competition in which a cash prize of £5000 was offered to any person discovering a new way of employing mercury on a large scale.² The far reaching internal rationalization of the Franco-German potash works which "have now attained a high standard of technical perfection" along with the scientific organization of the processes applied have solved the chemico-physical problems relating to the manufacture of potash salts.³ In the artificial silk industry, which may be cited as a final example, the leading firms in Europe have combined to form the Bureau international pour la standardisation

¹ Review of the Economic Aspects of Several International Industrial Agreements, p. 28.

² Ibid., p. 30.

³ Ibid., p. 33.

des fibres artificielles, ("Bisfa") the principal aim of which is expressed by its title. It also investigates the international economic position and markets in connection with artificial silk and "aims at the standardization and uniformity of the products, establishes testing regulations and endeavours to determine commercial usages." ¹.

The reality, then, of these economies cannot be denied. Two counteracting tendencies however, merit consideration. (1) International cartels, being essentially conservative bodies, tend to delay the natural weeding out of inefficient and irrational enterprises, a process which would rapidly take place under conditions of unregulated competition. This, however, it should be noted, is not always an un-mixed evil as the abrupt closing of enterprises, driven out of business by modern cutthroat competition is harmful both to the competitors themselves and to society, through the waste of capital, the loss of income and capital to investors, and unemployment. When the problem of distribution is successfully solved, however, this tendency of international cartels to stereotype existing industrial patterns will prove harmful and irrational to every economic element concerned.

(2) The question naturally arises as to whether cartellization is the best means to secure internal economies, it being recognized that trusts, fusions and mergers arrive at the same results. From the physical nature of international cartels and also from a study of their preoccupation with price maintenance and restriction of production, it seems safe to say that in the majority of cases, the more integrated concerns have been in a better position to achieve rationalization as such economies are concerned. The position of international cartels in this field can best be described as that of an intermediate stage

¹. Review of the Economic Aspects of Several International Industrial Agreements - pp. 55-63.

between freely competing industries on the one hand, and vertical combinations on the other, as the growth of the latter is aided by previous horizontal cartellization.¹ Hence the effect of international cartels upon a high degree of rationalization may be said to be largely indirect in that, by fostering the growth of agencies which experience shows to have been successful in achieving a high degree of internal coordination, international cartels indirectly promote the advance of industrial rationalization.

The conclusion to be drawn from the above discussion is evident and could not be summarized more admirably than in the words of the Report of the World Economic Conference of 1927. While the role that international cartels are to play in the field of rationalization is important, it is also limited. They may, under certain conditions, "secure a more methodical organization of production and a reduction of costs, and act as a check on uneconomic competition and reduce the evils resulting from fluctuations in industrial activity". They may, if the advantages of the economies are shared between the other parties concerned, benefit all of them giving not only greater profits to the producer but higher wages and greater stability to the worker, and lower prices to the consumer. On the other hand, they may "encourage monopolistic tendencies and the application of unsound business methods, may check technical progress" and exploit the consumer. They are "a development which has to be recognized and must be considered as good or bad according to the spirit which rules the constitution and operation of

¹The evidence on this point is set forth by Liefmann, - Cartels, Concerns, and Trusts - pp. 87-93.

the agreements, and in particular according to the measure in which those directing them are actuated by a sense of the general interest".

The effects and tendencies of international cartels in all fields are, then, of a typically twofold character. While advantages exist in certain directions, objections are confirmed in others. However, on the whole, the institution appears to have passed its first major tests, if not with colours flying, at least with a grade that leaves a challenging indictment against those who see in it only a grasping and avaricious attempt to exploit consumers and society as a whole. While there appears to be little doubt that many of the advantages claimed for it by its protagonists, especially in the field of prices, cannot be upheld in the face of statistical and deductive evidence, yet sufficient remain, that, when balanced with the few objections that have not been found invalid, a result emerges distinctly favourable to international cartels. Such a conclusion is purely tentative however, and will be subjected to further analysis at this point.

CHAPTER IV

Tariffs and Control

The relation between international cartels, tariffs and tariff policies is a problem both timely and important. It is timely in view of the present extent of obstructive tariffs and the agreement that exists as to their ultimate detrimental influence,¹ and important in view of the evident connection existing reciprocally between cartels and tariffs and the widespread effect of the latter upon the general conditions of economic development throughout the world. Unfortunately however, a diligent search has failed to reveal any systematic or scientific research on the question nor has there been any practical experience on a sufficient scale to enable definite conclusions to be drawn. Hence this study must be largely theoretical in its content, but wherever possible concrete illustrations will be drawn from modern economic life. It will concern itself with the interrelations existing between tariffs and cartels, the problem of dumping, which is an important aspect of rationalization, and finally with the effect of the conclusions reached upon public interest, tariff policy and the general problem of legal control.

Influence of the Tariff upon International Cartels.

The disagreement that exists among economists on this important question is evidenced in the fact that while Professor Jenks, before the war, argued that the removal of tariffs by strengthening foreign competition would tend to bring about the formation of

¹ "It is widely recognized that the maintenance of trade restrictions at their present levels threatens to impose limits to the restoration of both production and trade." League of Nations, World Economic Survey, 1933-34 - p. 203.

international cartels where they did not already exist,¹ the industrial experts of the League of Nations, on the other hand, have recently asserted that "it is ... tariff protection which, though not the sole factor in the case, often facilitates the establishment of national industrial agreements".² Empirically there seems to be no doubt that both international cartels and tariffs arise from the same circumstances, i.e., depressed world economic conditions and the anarchic character of its attendant competition. This is clear even from the most superficial survey of the economic changes that have taken place in the past decade. The rapid growth of international cartels in those years has already been noted. Regarding tariffs it is only necessary to turn to the evidence presented to the Monetary and Economic Conference when it met in the middle of 1933 to be assured of the almost universal increase of tariffs,³ an increase, what is more, whose effects have undoubtedly been intensified by the fall in prices which augmented the effectiveness of the existing specific duties. It would constitute an error, however, to recognize any a priori relation between these two weapons of economic warfare because of this parallel growth as there are a number of very important branches of production which do not lend themselves readily to organization in cartels, and also because the satisfactory operation and continuance of such as are in existence depend upon a number of favorable conditions. Hence the relation, if any, would appear to be largely indirect. Theoretical considerations aided by statis-

¹Jenks - "The Trust Problem" - pp. 47-8, 221-2.

²League of Nations - General Report on the Economic Aspects of International Industrial Agreements. - p. 30.

³The Program for the World Economic Conference (1933) p.55.

tical data tend to bear out this supposition.

In the first place, it has been said that an increase of protectionism diminishes the free markets of the world and thereby helps to intensify the competition in those that are left. Such an argument certainly does not apply to-day with the same practical force that it did a few years ago when it was frequently quoted to express the relationship existing between international cartels and the tariff. To-day the free trade area has narrowed and trade restrictions have been vastly increased and their efficiency strengthened. "There is no longer the same wide neutral market or series of markets to which trade may be diverted if shut out of one area." ¹. Nevertheless it is possible to exaggerate the extent to which international trade is now regulated by such agreements and both from its theoretical value and the fact that a great part of the basic exchange of raw materials against finished products still remains little hampered by tariffs, it will prove valuable to follow through the implications of the suggestion.

Let us suppose, for instance, that French or German governmental restrictions on the quantity of imports of leather, or a high tariff rate, succeed in keeping out most foreign leather manufacturers from these countries. This tariff will not diminish the intensity of competition among these products in other markets where no import restrictions are imposed, or where the existing tariff rates permit the importation of these products on an equal basis, but the fact that the French and German markets are closed to further exploitation will intensify such competition in those markets that remain, and this,

¹ League of Nations World Economic Survey, 1933-34, p. 31.

as we have seen, will create the necessary stimulus for the formation of an international cartel. Now let us suppose that the producers in the closed territories begin to export or increase their exports into the open territories, a situation that has arisen in the case of zinc and lead. That this will undoubtedly aggravate the already increased competition and render the formation of an international cartel still more likely is clearly evident but the introduction of a few statistics¹ will lend concreteness to the truth of the conclusion. The case of zinc will be considered first.

While the Canadian production of zinc smelter rose from 24,900 metric tons in 1924 to 78,100 tons in 1929, 110,200 in 1930 and to 89,700 tons in 1933, it is only possible to subtract a domestic consumption from this output of about 18,000 tons. That leaves a surplus of 60,100 tons in 1929, and 92,200 in 1930 which had to be disposed of somewhere - viz., in Europe. In that country production has only risen from 684,000 tons in 1913 to 695,900 tons in 1929. The increase is thus very slight and far below that of the increase in consumption. However, owing to the larger output of Canada and the United States, - Europe which used to export to those countries before the war, not only finds these markets closed, but even receives large exports from them. An international cartel is the natural outcome of such conditions. In this case it was the European Zinc Cartel that was formed.

The experience of lead is comparable. Important new mines have recently been discovered in Canada, Mexico, Australia, and India and they now contribute about 35 per cent. of the world production.

¹Source: Statistical Year Book of the League of Nations 1933-34, pp. 135, 137 and "Review of the Economic Aspects of Several International Industrial Agreements, pp. 18-19.

The following statistics relate to these four countries -

	1919 TONS	1924 TONS	1929 TONS	1933 TONS
Australia	84,000	130,500	180,400	209,400
Canada	20,000	59,200	138,100	115,500
India	19,000	52,600	81,500	73,200
Mexico	78,000	133,900	229,800	120,600

The trend of increase in these figures is clearly visible but they assume their rightful importance only when they are balanced with the small domestic consumption of these countries, 35,000 metric tons in Canada, 19,000 tons in Australia and negligible quantities in Mexico and India. The same situation is thus reached as in the case of zinc, i.e., European imports far exceeding her possible consumption, strenuous competition, a considerable price decline, and an endeavour on the part of producers to come to an agreement to maintain and regulate quotations, that is, a typical international cartel.

The impermanence and generally unsuccessful character of both the zinc and lead agreements in no way alters the conclusion to be drawn from this situation. Therefore it may be said that the closing of certain markets through high tariff barriers shifts the competition of these industries to the remaining open markets¹ and leads to intensive price cutting with its resulting cartellization. Exports from the closed territories have been shown seriously to aggravate the situation.

The second "theoretical consideration" centers around the frequent allegation that tariffs play an indirect part in the for-

¹ A further example may be found in the International Association of Bone-Glue Manufacturers. The high tariff in the United States "was responsible for very sharp competition" among European producers of the raw material. - Review of the Economic Aspects of Several International Industrial Agreements - p. 46.

mation of national combines from which international cartels may be formed. It is possible, as Dr. Plummer appears to have done,¹ to overover-simplify this connection. Although it is granted that national cartellization is not practicable and cannot last unless the competition restricted on the home market is subject to similar restrictions as regards the imports of goods from other countries, a restriction which generally takes the form of tariff protection, yet it is also apparent that simple protection, i.e., protection which is just sufficient to enable the protected country to become a producer of the goods in question and does not allow a margin for the raising of prices above full cost price, does not create either the need for cartellization or a condition of its success. Insofar as overprotection creates both of these it fosters the growth of national cartels and, in a few cases, might be termed a real cause and not merely a condition of cartellization. In the majority of cases, however, the high tariff schedule will lead to an increase in the rate of national industrial profits and then to a competition which finds expression in overproduction and a drastic price decline. Such conditions, in turn, lead directly to the formation of national cartels, and in some cases national combines or trusts. It is possible to assume that this chain of events has taken place in most of the leading industrial nations to-day through the persistently high tariff policies that have been followed since the War. Although it is, for the most part, impossible to illustrate this tendency statistically, the League of Nations has included an admirable summary of the situation as it now stands, in its World Economic Survey 1933-34. "Wherever protective tariffs have been high, as in Central Europe, there are many

¹ Plummer, op. cit., p. 101.

cartels, whereas there are relatively few in the low-tariff countries such as the Netherlands and Belgium." 1. It thus becomes apparent that national cartels are not necessarily formed to take advantage of tariffs but rather producers strive to get both tariffs and cartels to lessen the strife of national competition, which was caused, in part, by high tariffs. Thus a vicious circle is completed of high tariffs, competition, overproduction, cartellization and tariffs.

The link with the international field is formed through the fact that "a protective tariff frequently increases the need and the wish for export" 2. and at the same time economic nationalism constitutes a barrier against these reciprocal exports of the industries affected. The solution of this difficulty lies in the international cartel. Hence an overprotective tariff, by fostering the growth of national combinations is an indirect force behind the formation of international cartels. Paradoxical as it may seem, it is also a force behind their disruption. This has been seldom emphasized sufficiently and for that reason will be discussed at some length at this point.

It is common knowledge that the majority of international cartels have export quotas for the various national groups, which are generally allowed the benefit of special privileges on their home markets. The internal disorder which accompanies the revision or allocation of these quotas is also well known 3. and accounts for the instability inherent in most present day cartels. It therefore follows that any force which tends to upset the equilibrium that an international cartel has succeeded in achieving after prolonged negotiations

1. World Economic Survey, p. 72.

2. Liefmann - International Cartels, Combines and Trusts - p. 83.

3. For an excellent analysis of quota difficulties see Plummer, op. cit., pp. 126-140.

may throw it into complete disorder and precipitate its dissolution. That tariff laws have been prominent among these "forces" will be evident from the following illustrations.

The International Steel Agreement of 1926 for example, provided that if Germany increased the import duties on steel, any signatory could denounce the cartel by giving three month's notice.¹ Turning from steel to copper we find that in the Spring of 1932, "in order to counteract the gradual shift of production from the high cost producers in the United States to all low cost concerns elsewhere, the United States Government imposed an import duty on the metal (copper) of four cents per pound. The effect was to throw the world's copper industry completely out of gear. On the one hand, producers outside the United States, deprived of a large potential demand, were faced with the necessity of reducing production further; and on the other hand, as was to be expected, the imposition of the duty led to the disruption of Copper Exporters Incorporated. Four of the largest members, the International Nickel Company of Canada, the Chili Copper Company, the Cerro di Pasco Corporation and Katanga have already announced their decision to withdraw from the cartel." ²

1. Knight, Barnes and Flugel - Economic History of Europe - p. 669. Article 10 of the International Steel Agreement reads, "The present Agreement was concluded on the assumption that throughout its duration the tariff ratio applicable to iron and steel products imported into Germany would not be increased. If Germany should proceed to increase the said ratio, the present Agreement may be denounced at any time by each of the Contracting Parties at three month's notice, and each of the Parties shall then recover full liberty of action in relation to its Government as regards tariffs".

2. Economist, July 9, 1932 - pp. 60-61.

In a somewhat similar way, Great Britain's imposition of a tariff on lead in March 1932 resulted in the disruption of the lead cartel.¹

These examples are sufficient to show that tariff changes, when combined with "the most common general cause of friction and dissension within international combines,"² i.e., the method of allocating quotas, constitute an effective means of temporarily disrupting existing international cartels.

The general conclusion would then appear to be that while high tariffs undoubtedly provide an indirect but powerful impetus to the formation of international cartels, frequent changes in their scales of duty will render the continued existence of the cartel insecure. The interest of the latter then appears to lie in the stereotyping of existing tariff laws, or at least in the prevention of changes that would destroy the existing balance between the members of the cartel in question. In other words, if the scale of tariff protection is to be either raised or lowered, it would be in the interest of international cartels if each of their members bore the same ratio to the new tariff as they did before the change. Only in this way would existing quotas be secure and the entente sheltered from the disintegrating influence of prolonged quota negotiations resulting from the "chop and change of tariff policies".

Dumping

The chief problem connected with customs protection as a basis for cartel agreements is the so-called "dumping" problem. This

¹•Economist, July 23, 1932, p. 164.

²•Plummer, p. 126.

involves, as is generally known, the sale of a product in foreign markets at a price below the actual cost of production, while the domestic price is increased beyond its normal level to compensate for the losses suffered from the international sales. While it has been stated ¹ that the concept of genuine dumping does not include either (1) the export of domestic surplus output above cost but below domestic price in order to reduce the fixed cost per unit by a full utilization of resources, or (2) the export of domestic surplus to be sold at cost in foreign markets to protect the producer against the reaction in the domestic market if too large a supply were offered, such a concept seems to be based on the question whether or not exporting below cost of production (including profits) is justifiable from the standpoint of the industry in question, with characteristic neglect of the ultimate consumer who might be adversely affected by such a policy. Although it is granted that the industry will benefit if the manufacturers on account of cartel prices are unable to increase sales in the domestic market but need a larger sales volume for a reduction of unit costs which can be obtained by export at cost (excluding profits), yet if the industry could reach the entire, or even part of the necessary sales volume within the country by a reduction of cartel prices, the domestic consumer should be given the benefit of a price reduction. As the elimination of dumping is usually interpreted to be a phase of rationalization and as the latter "precludes any idea of consumer exploitation", it becomes evident that dumping, in connection with national cartellization should include any export of goods cartellized in the domestic market at lower than

¹. Burn, op. cit., pp. 238-239.

domestic prices, i.e., each of the three methods of export outlined above.

With this as a basis the connection between dumping and international cartels becomes quite apparent. As the home markets of each of the members of an agreement are regulated, and foreign markets "distributed" one of the reasons for dumping disappears and the national cartels are "enabled to treat their home markets with greater consideration".¹ This is aided by the mutual understanding and resultant action on the part of the competing producers of the different countries. Inversely, if a country has an important industry in danger of being demoralized by dumping on the part of economically stronger competitors, there is a temptation to join or to form an international cartel and thereby obtain full protection for the domestic market. There certainly can be little doubt, theoretically at least, that international cartels help to curtail the dumping of goods on foreign countries.

Such a conclusion, of course, does not mean to imply that there is an a priori connection between dumping and international cartels in every case. Only those cartels which include the large majority of the various producers and which have developed an organization powerful enough to enforce its regulations are in a position to prevent dumping practices and then only insofar as the member countries are concerned. This last clause introduces a disturbing chain of thought.

An international cartel, while it may remove the danger of dumping upon members of the agreement may quite conceivably lead to

¹ League of Nations - "International Industrial Agreements" (1931)
p. 27.

dumping on a country whose producers are not connected with the organization. This would probably result in retaliatory measures on the part of the third country, i.e., a raising of the protective tariff which would of necessity assume an overprotective character. This, as has been shown, would tend to increase the production and possibly the number of producers in that country which, in turn, would result ultimately in an excess of supply over demand. Such a chain of reasoning leads inevitably to the formation of a national cartel which, according to all the known laws of industrial behaviour, would probably become affiliated with the international body which had introduced the dumping tactics and its inevitable chain of causation. This conclusion is, in the long run, then, at variance with those economists who tend to think of international cartels as leading, in many cases, to dumping practices which may prove to be more disastrous than those which they have remedied. Although, admittedly, the time necessary for the fulfillment of such a conclusion may be long relative to the life of the normal international cartel, yet insofar as it tends to be inevitable it illustrates the fact that in the majority of cases international cartels prove successful in dealing with the problem of dumping and in so doing remove one cause for higher national tariff levels.

Influence of the International Cartel upon Tariff Policies

The growth of international cartels has exerted a profound influence upon tariffs and tariff policies in two distinct fields. In the first place, the question has been opened up as to whether international cartels render tariff barriers unnecessary and ineffectual and secondly, the tariff has been proposed as an instrument or weapon to counteract alleged uneconomic excesses of certain cartels in both the domestic and international fields. The importance of these two possi-

bilities cannot be overemphasized. In a world where "the chief impediment to the growth of the world's prosperity" ¹ is to be found in its tariff policies, any force which holds out a hope, however small, of counteracting or mitigating such a poisonous influence is deserving of the highest degree of scientific analysis. On the other hand, if the tariff constitutes a possible means of countering excessive price increases resulting from cartel action, it, too, is worthy of consideration and further investigation. Each of these will be considered in turn at this point.

As far as international cartels that reserve the entire home market to local members are concerned, it seems safe to say that they render the effects of protective tariffs largely ineffectual. This is due to the fact that such a cartel replaces the import duties - at the most a partial obstacle, by a barrier which relies for its strength upon mutual consent and desirability and which is, therefore, almost impregnable. Naturally the more closely knit and comprehensive the cartel, the more complete and effective is this "private tariff", and in proportion to the latter national tariffs become redundant. A classic example of this may be seen in the agreement regarding aniline dyes between the producers of France, Germany and Switzerland. While the French market was encircled by an overprotective tariff energetically defended by the Government for reasons of military policy, Germany found it impossible to tolerate such a discrimination as aniline dyes constitute one of her most important exports.² Hence an agreement between the two groups had to be sought in the sphere of private industry. The various discussions towards this end were conducted

¹. Salter, Arthur - Recovery: The Second Effort - p. 172.

². Review of the Economic Aspects of Several International Industrial

with the express object of diminishing the difficulties of this important branch of commercial treaty negotiations between Germany and France".¹ The resulting agreement, concluded in December, 1927, has proved successful to date in circumventing the high French tariff barriers.

Furthermore if an international cartel decides under pressure of certain circumstances, to export goods into a certain "home" market, all tariffs would be powerless to prevent such a move. Nor would they be able to protect the consumer against a monopolistic price increase on the part of a national member of a comprehensive international cartel as the competitors of the latter would not be worth mentioning.

Although the truth of all this must be admitted it by no means follows that a general lowering of tariffs will take place as soon as the respective governments become aware that their devices are both impotent and unnecessary. And this is, after all, the important point as the paramount problem facing economists today is to discover a means by which the stranglehold of high tariffs upon world trade might be lessened.

In 1927 the possibility of achieving such an end by the action of international cartels was attended with much optimism by the delegates to the world economic conference held in Geneva during that year. Two years later, however, the Economic Consultative Committee made the following important pronouncement on the question.

"It was suggested that these combines do not, as a rule, make for tariff reduction unless the parties they bring together are of approximately equivalent strength and

¹Review of the Economic Aspects of Several International Industrial Agreements, p. 42.

are anxious to develop their strength by means of technical improvements rather than by Customs protection.

"Experience has shown, it was agreed, that the regulation of competition which results from industrial agreements does not invariably lead the parties to consent to tariff reductions, since combines are often concluded on the basis of the commercial possibilities resulting from the protection afforded by the existing tariffs, and a change of tariffs modifying these possibilities would be regarded as jeopardising the combine itself.

"Moreover, if the combine brings together parties of unequal competitive powers, they will consider themselves justified in claiming different protective rates to preserve their home markets.

"It was represented that combines, when intended mainly to stabilize the existing output, would preclude the process of natural selection which should follow from the open competition promoted by the reduction of tariffs." ¹.

It seems difficult to avoid the implications of the above oft-quoted statement. That it contains the truth respecting the question at hand is generally admitted.² Two further considerations, however, which may prove enlightening, merit attention. In the first place it should be noted that tariffs are not imposed solely for trade protection but also for revenue purposes. The urgent need of balancing national budgets often finds expression in an upward revision of tariff schedules which is

¹. League of Nations - "International Industrial Agreements" (1931)
p. 29.

². *Quarterly Journal of Economics*, vol. 191-192

reinforced by the natural desire to penalize the outside producers. Thus there is always the possibility that even if a reduction of the duties on cartellized commodities were secured, it would be balanced by an increase of duties on other imports for fiscal purposes.¹ Secondly, a caution should be introduced against treating the international cartel movement, at least from the practical end, as limitless in scope as this involves an absurdity in the face of the generally accepted fact that only certain commodities lend themselves readily to cartellization. It is quite obvious, for instance, that products involving a high degree of individual skill, which cannot be replaced by machinery, do not make good subjects for cartels. Insofar as this is true, and it has been said that "an industry that is not based on a supply of raw materials or manufacturing processes that lend themselves to financial or legal control, and that does not involve a large outlay of capital, or in which the application of large amounts of capital does not give corresponding benefits, does not furnish a basis for a cartel, whether domestic or international",² then there is a proportionate margin of commodities that will have to look to the State for protection by way of tariffs. Hence the influence of the international cartel on tariff policies is restricted both by political exigencies and natural limitations inherent in the cartel itself, as well as by those considerations listed by the League Committee in 1929. For convenience the latter may be said to involve two factors, the maintenance of the cartel, and the stability of certain tariff levels. Each of these, when considered previously were found to be of doubtful strength as a

¹ Snowden, P. - "Amalgamations in Industry" - Contemporary Review, July, 1923.

² Domeratsky, L. - "International Cartels as an Influence in Tariff Policies" - Annals, January, 1929, p. 241.

basis for any concrete results in the way of tariff reduction and in a world such as the one to-day when political upheavals and tariff policies are very much in the melting pot, the validity of such a conclusion is greatly increased.

Thus, any direct influence that cartels may have upon tariff policies appears to be solely in the field of psychology. Here it is safe to assume that when the outstanding industries of one country have close relations with the corresponding industries of another country, and when the high executives meet more or less frequently to discuss their mutual interests, commercial negotiations between the two countries would be influenced by considerations for the interests of the outstanding industries.

It is evident that such a conclusion is deeply pessimistic as regards the possible disappearance of tariffs before the advance of international cartels, at least in the near future. The most that it seems possible to look for is a certain degree of stabilization of customs duties resulting from the evolution of more permanent and more representative international cartels. This is also highly conjectural but appears to hold out more hope of fulfillment than any possible mitigation of high tariff barriers through the development of international cartels.

The possibility or advisability of employing the tariff as a weapon against economic abuses resulting from cartel action, with particular reference to Canada, now merits brief consideration. The field for such action lies principally in two directions, i.e., in the combatting of allegedly monopolistic price increases and as a remedy against dumping.

Historically it is of particular interest to note that

tariff reductions as a means of countering excessive price increases were first employed in Canada.¹ Each of the Canadian tariff laws of 1897, 1907, 1910 and 1923 envisaged the possibility of tariff reductions if the price of any commodity reached a monopolistic level due to the action of a domestic combine or cartel. The strength of the law in practice was clearly seen in 1902 when the duty on paper was reduced from 25 per cent. to 15 per cent., and again in the fall of 1930 when the duty on glass was reduced by the Conservative government as a retaliatory measure against a price rise instigated by the glass cartel and protected by very favourable tariff provisions.

The principal difficulties in the way of a consistent use of such a policy however, appear to lie in three directions. (1) Cartels which are based on natural or restricted sources of supply as with nickel, or on extremely heavy costs of transport relatively to the value of the product, as with coal or cement, are not amenable to foreign competition no matter how low the tariff rate. This was exemplified as far back as 1887. "Last year (1887) the duty on coal was abolished, but, instead of the combine ceasing to have its influence and power, though we have free coal in Canada ... that combine is more powerful to-day than it was last year when there was a duty on it showing that the effects of the National Policy, the effect of the duties, has nothing to do with the combines which are formed." ²

(2) Commodities which are nationally cartellized by members of a fully organized international cartel are likewise independent of tariff alterations as foreign competitors in such cases are either impotent or non-existent.

¹ Liefmann - "Cartels, Concerns and Trusts" - p. 207.

² Debates in House of Commons (Ottawa) - February 29, 1888, p. 29.

(3) Even in connection with the number of products upon which tariff reductions have a very considerable effect, the difficulty arises of deciding whether or not the public interest is prejudiced by a specific cartel price policy. In Canada this has not proceeded very far and the terms "unduly", "unreasonable" and "to the detriment of the public" (Section 498 of the Criminal Code) still convey very elastic meanings. In general, however, it may be said that the Canadian courts will condemn any arrangement designed to eliminate competition unless adequate public safeguards are provided. Although it is recognized that this method of criminal prosecution is necessary under the present Canadian law respecting cartels and combines, yet, for commodities of this group, the mere discussion of possible tariff reductions at Ottawa with practical tariff provisions in the background appears to be a more effective means of inducing caution into a cartel's price policy. The cumbersome and long drawn out machinery of the Combines Investigation Act could be modernized and used to combat monopolistic price levels in those commodities which, by their very nature, or international connections, remain unaffected by tariff reductions designed to promote foreign competition.

The relation between dumping and tariff policies in their legal aspects has also been prominent in Canadian legislation. By the Tariff law of 1907 tariff increases were granted on commodities sold cheaper in Canada than in the country of origin providing similar goods were also produced in Canada.¹ Dr. Liefmann regards the advisability of duties such as these, apart from fiscal reasons, as

¹ Liefmann "Cartels, Concerns and Trusts" - p. 209.

questionable, substantiating his argument by a one-sided appeal to justice. "It would therefore be unjust simply to take tariffs off industries which happen to export, but not off other industries which damage the consumer just as much even if they do not export

The mere fact that a cartel sells cheaper abroad is never a criterion of injurious practice - the only criterion is: are home prices quoted by it excessive?"¹ It is impossible to follow Dr. Liefmann in the stand he has taken. National combines have often been known to embark upon a strenuous dumping campaign in order to exterminate foreign competitors or conquer foreign markets and while, at first glance, the foreign consumer appears to benefit from the low prices, he too will be subject to higher prices as soon as either of the warring industries emerges victoriously from the struggle. It is impossible not to condemn seriously such a policy from any standpoint, and particularly the one of justice. While international cartels prove effective in regulating this type of economic warfare as far as their member bodies are concerned, there still remain many industries undisciplined by any means other than tariff regulations and it would appear extremely ill-advised to remove the dumping duties on these commodities.

The foregoing considerations, brief as they have been, show that the significance of protective tariffs has entirely changed through the development of the cartels and in so doing there has been a wide but somewhat qualified field opened up for the utilization of such tariffs in the control of "uneconomic excesses" of national cartels.

¹ Liefmann "Cartels, Concerns and Trusts" - p. 206.

The whole problem of international control is thus introduced, as any such discipline must necessarily begin with the domestic organizations. This problem will be further analyzed at this point.

Possibilities of Control and Legal Aspects of International Cartels.

It is impossible to regard the rise of international cartels with indifference. A list of its economic advantages may cover many pages but its dangers are evident. Wherever a few men secure the power to exercise a deep control over national life and work, and yet have no other motive for so doing than private interest, there is need for public supervision fortified by possible legal control. There can be no doubt that the movement is here to stay and in the face of this recognition it would be the height of economic folly to repeat the stigmatizing prejudgment of economic tendencies that placed Trade Unions under a handicap from which they are now only commencing to recover. The problem is to evolve a means of international control, legal if possible, by which the evils of international cartellization may be combatted and their benefits secured. The criterion of judgment should be the concept of rationalization so that the control would "stimulate all tendencies towards increased rationalization and increased productivity, on the one hand, and restrain all influences which, on the other hand, through the fusion of economic power, are working against rationalization." ¹.

Any control of international cartels must assume one of four forms, (1) internal control (2) external control in either the national or international sphere (3) educational supervision, i.e., extra-

¹•Hirsch, op. cit., pp. 18-19.

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¹•(Hirsch, op. cit., pp. 18-19.

legal control such as publicity or consumer organization (4) any combination of the preceding three methods.

It seems impossible to envisage adequate control arising from within the cartel itself, at least in the near future, due to the dominating strength of individual self interest and the many openings for exploitation which still honeycomb the present economic system. External domestic control, in the past - with one or two exceptions - has been exercised by antiquated legal provisions formed when cartels were still dominated largely by unenlightened self-interest and its short-lived but efficient exploitation. Any revision with the view of securing modernity and uniformity appears purely Utopian, as an independent means of control, due to the evidently different psychological attitudes towards the cartel movement, prevailing in separate States. And yet such a revision is necessary to combat international cartels on a national basis as they are free to move their headquarters to any country whose laws are most favourable to that type of organization. External international control, in legal form, is likewise faced with insurmountable barriers, at least in the present stage of legal and economic development. While the idea of a world court for trade and commerce has been discussed at great length,¹ the results achieved have been negligible due to (1) the necessity for further scientific research into both international cartels and private international law; and (2) the highly political character of the whole question. Regarding the latter the industrial experts of the League of Nations had this to say: "Without an adjustment of political and economic interests as between the nations, it will not be possible or

¹ Harvard Law Review, 1926.

feasible to grant to any body the right of control of, or to give it the possibility of exercising practical influence on, the activities of international organizations." 1.

What we have termed "educational supervision" therefore appears to hold out a better chance of success than either internal or external control. This would include what Professor Hirsch has called a "general observation post", 2. established by the League of Nations from which all international agreements could be observed with a view to an enquiry into the possibility of a rational transformation of the world economic system as a whole. When all the available material has been drawn upon, 3. this observation post, which could well be incorporated in the International Management Institute in Geneva, would report to the League of Nations and a "careful, adequate and courageous" 4. system of publicity instituted by the latter body.

Two criticisms might fairly be directed at this plan.

(1) There are many international cartels to-day which have already shown their unwillingness to give the information, not about secret processes or inventions but about costs, price scales, etc., which is needed as a basis for recommendations and public reports. In the absence of national legal cooperation, which, as has been noted, would be very difficult to secure, it would be necessary to use the "request" method of obtaining information and it would, moreover, be impossible to force cartels to give it, as the League would have no legal jurisdiction within the borders of national states.

1. League of Nations. World Economic Conference 1927, Final Report. p. 40.

2. Hirsch, op. cit., pp. 23-24.

3. Inquiries into wages, hours and working conditions might be carried out by the I.L.O.

4. Salter, op. cit., p. 225.

(2) Under such a plan the sole sanction which the international body could use against recalcitrant cartels would be the publication of names. Boycotts or legal action, which might prove far more effective, would be impossible for reasons already stated.

These criticisms, which carry a good deal of weight, indicate the desirability of some form of combination in both the external and extra-legal fields as a basis upon which an adequate system of international cartel control might be forged. The following outline might serve as a basis for some such system.

(1) Wherever possible, national cartel legislation might be brought into accord, at least to the point of ceasing to regard legitimate association as an offence. This could be aided by a universal and clear distinction between lawful industrial agreements and unlawful, possibly monopolistic association. A lawful association could be recognized by the following (a) Its aim of stabilization and the maintenance of a normal equilibrium between production and consumption. Monopoly, by way of contrast, is based on market disequilibrium which is, moreover, a condition of its very existence. (b) The regularity of work which it affords as a result of a broad survey of marketing and production possibilities. An unlawful association, on the other hand, could not possibly ensure regularity of work as it is based on an unbalanced state of the market. (c) The fact that it is never secret. Lawful cartels do not fear the light of publicity and they therefore work quite openly. When the aim is monopoly, on the other hand, secrecy is usually a condition of success. (d) They are usually concluded for a definite period of time with the probability of renewal. The aim of market equilibrium could not be secured by a temporary, ephemeral scheme.

It is evident from the above that the writer finds it impossible to concur with the opinion of the League experts in 1927, that the objective of international control would not be advanced by bringing the laws of each state into accord with one another as far as practicable. Such, on the other hand, is a prerequisite of effective control. Hence it is advisable to introduce some such suggestions as the above immediately following a program of preparatory press education and propaganda instituted by a central body under the League of Nations.

(2) An investigation should be commenced, possibly by the World Court, with the aim, first, of clearing away all obstacles to the enforcement of a complete publicity concerning all international agreements and their ramifications, secondly, of determining what measures and machinery of international surveillance and supervision should be adopted, and finally, of determining what sanctions might be applied against an offending cartel.

(3) An international observation post, such as the one mentioned above, might be set up under the League, to which complaints and appeals could be addressed, and from which information and inquiries might be sent to the appropriate public authorities.

(4) The immediate need seems to be for a widespread publicity in order that the public, once awakened, "could urge and require the League to pursue the task entrusted to it. If the League, adequately supported, collected information from other sources and asked the cartels for what it needed from them, and then published what it could, pointing out clearly where its report was defective because information had been refused by such and such (named) cartels, rapid advance could be made." ¹. The Report of the World Economic Conference of 1927 also

¹. Saltor, op. cit., p. 205.

contains a statement in this connection that is still worthy of repetition. "The Conference is of the opinion that the publicity given in regard to the nature and operations of agreements constitutes one of the most effective means, on the one hand, of securing the support of public opinion to agreements which conduce to the general interest and, on the other hand, of preventing the growth of abuses."

Thus, in conclusion, while it must be admitted that any legal control of international cartels from an international base appears to be beyond the grasp of the near future, an extra-legal system of central publicity combined with the highest degree of national uniformity that can be secured may very conceivably prove capable of bridging the transition period until an adequate legal control is finally evolved. This belief is strengthened by the present improbability that any international cartel can be set up which is consistently able to exploit the public, as the danger of substitution and outside competition always exists. The future is a different question however, and inasmuch as the struggle between freedom and authority in the industrial field must finally eventuate in law, a caution should be introduced against stereotyping the latter in a rigidity comparable to that existing in the political field. While a certain degree of rigidity implies strength, any final control must be sufficiently flexible to permit of frequent amendments to be introduced whenever the dynamics of modern economic society warrant.

CHAPTER V

Future Prospects

The present state of world economic and political chaos is moulding a future in which the problems of war and of socialism must play a leading part. The future of international cartels, is, in part, the relation which they must bear to these two forces, both as an historical process and as a resulting organism. Although such a relation lies close to the boundaries of this study and is inevitably clouded by a complete absence of available source material, a probable tendency is discernable, and, at a time when the world seems to be on the threshold of great economic changes, an indication of such a tendency cannot be omitted. Nor can an outline of the position of Canadian industries in the international cartel movement be neglected in a Canadian study of that subject. A brief discussion of these problems will provide a suitable basis for a more far-reaching conclusion and survey of the whole subject of international cartels in modern industry.

Peace or War: Socialism

In the few reflections which have been made upon each of these problems, two schools of thought are to be found. Regarding the former, the fact that international cartels were successful, during the decade following the War, in crossing politically estranged frontiers and in creating between them some degree of economic union, has led to the suggestion that an increase in their numbers may help to reinforce the influences making for world peace. On the other hand, a modern periodical has suggested editorially that cartels, in the long run, may "push nations apart, dividing them into opposing industrial blocs as treaties have divided them into political alliances." 1.

Each of these beliefs appears greatly to exaggerate the powers of international cartels, at least as this study has found them. The former, for example, does not take into account the amorphous nature of most present day cartels which would probably result in their dissolution on the outbreak of a world war. Nor does it account for the fact that a war would create an excess of demand over supply in most cartellized industries and thus remove the principal *raison d'etre* of both the existence of the cartel and the reason for regarding war as an inimical influence to be avoided if possible. Both of the schools appear to credit international cartels with sufficient unified industrial power to stand against the more fundamental political and economic causes of war, a belief which is unwarranted for the reasons stated above. Of course, closely integrated international trusts and combines such as the Standard Oil, Royal Dutch, and Shell groups, Courtauld's and Unilever Ltd.,¹ open up new possibilities beyond the bounds of this work. In general, however, from a study of the alleged relation between the Standard Oil trust and the Paraguay-Bolivian War in South America it seems that the influence of these groups upon the broad problems of peace and war has also been exaggerated. A further study would have to be undertaken however, before definite conclusions in this field could be drawn.

Regarding international cartels, the most that can be said is that they cut across national frontiers and help to eliminate them as factors in the world's economic life and competitive struggle, thus

¹ For a chart clearly showing the ramifications of the Unilever Combine, see - The Economist, June 11, 1932 - The international oil grouping in graphic form appears in the issue of December 26, 1931.

creating interests and forces which tend to counteract the competitive nationalism which is the world's chief danger. It appears conclusive, however, that this function does not extend to an amelioration of the factors involving the maintenance of peace or the declaration of war.

In the field of socialism a more definite though somewhat paradoxical relationship with cartellization may be drawn from the two bodies of thought on the question as to whether cartels are to be regarded as a barrier or as a step between the present order and that of socialism. While the socialists believe that by centralizing industry, international cartels will make the final transference to the State a simpler matter than it would otherwise have been, there are those who point to the implication inherent in socialism, that any transition must be orderly and parliamentary, and to that contained in cartellization, i.e., that it is the very exponent of the capitalist system, and draw from them the conclusion that cartels are a barrier to socialism, in that, by them the class struggle is intensified. It is to the latter view that this study tends.

Although theoretically combination is carried to that point where transference to the State will be most necessary and most simple, in practice, cartels will probably be found to dissolve rapidly into their component parts at the mere suggestion of possible State ownership. Even working upon the highly improbable premise that such would not be the case, it is entirely possible that fascism¹ or a communist

¹. As these words were being written, Mussolini, in an address to the General Assembly of Corporations stated, "Large industries will be aggregated in great units corresponding to what are called industrial cartels. They will assume a special character in the orbit of the State." Il Duce thus proposes the assumption by the State of control over all Italian industry. Mail & Empire - Toronto - March 24, 1936, pp. 1-2.

revolution rather than socialism would be the logical outcome of increased cartellization combined with the decadence of capitalism, in European countries at least. The position of the Socialists in supporting the development of cartels can only be explained by their affinity to the German liking of organized control and by appealing to the supposition that it was not so much whether or not international cartellization was considered the pioneer of socialism as the power of the State to control existing cartels, that influenced them in their choice. From this point of view, even assuming that future economic development will tend towards the Socialist State and that such a development is desirable, it is impossible for any adherent of the evolutionary method of progress, as opposed to the revolutionary, to find in the growth of international cartels a means towards this end.

International Combination and Canadian Industry

Canada has long been affiliated with the international cartel movement. In the early months of 1888 a motion was introduced in the Federal House "that a select committee be appointed to examine into the nature, extent and effect of certain combinations said to exist with reference to the purchase and sale in Canada of any foreign or Canadian products ... we know further that many articles produced in England, which are not produced in this country ... are sold in Canada according to prices regulated in England. The manufacturer in England sells at a certain price and he compels the Canadian dealer to sell those articles at not less than a certain figure".¹

¹. Debates in House of Commons (Ottawa) February 29, 1888, pp. 28-29.

From that date to the present, although specific information cannot be obtained due to the legal situation obtaining in this country, it is safe to say that only a few Canadian producers per se have been represented in important international cartels, but, as subsidiaries of American or Continental corporations, their relationship with the movement has been indirect but none the less important. For instance, in the matter of base metals, a private source has vouchsafed the information that a direct relationship exists between the Canadian producers of lead, zinc and cobalt and the world cartels in these industries. It is of interest to note that while the European Cobalt Association confines itself to maintaining standard prices, the zinc and lead cartels impose drastic regulations as to output upon their members. In no case, however, has the Canadian producer been hampered by any restriction or division of markets. With reference to copper, Canada appears to be indirectly linked with Copper Exporters Incorporated through the American Metals Co., selling agents for International Nickel, which is a member of the cartel. This indirect affiliation likewise has not operated to exclude Canadian copper from any market. It has been stated that the Page-Mersey Tube Company is a member of the international tube cartel but a definite statement on the question is impossible to obtain. The sole Canadian producer of aluminium is a member of the International Aluminium Cartel, which, as has been noted, proved successful in stabilizing world aluminium prices but which, on the other hand, is unable profitably to export to the United States due to the non-signatory Aluminium Company of America which controls almost one half of the world production along with Norwegian and French interests.¹ Producers in

¹ Southard, op. cit., p. 170.

Canada, South Africa, Columbia and Soviet Russia constitute the International Platinum Cartel formed in 1931 with a joint selling agency in London, viz: Consolidated Platinum Ltd. In the matter of insulated wire and cables there is a definite connection between British Insulated Cables Ltd., and the Associated Telephone and Telegraph Company of America¹, one of which controls several Canadian plants, including the Eugene Philips Company of Montreal and Brockville.

In the field of chemicals, Canadian producers are connected through financial interests with the international calcium carbide cartel whose head office is located in Brussels, with the explosives cartel through Canadian Industries Limited, a joint subsidiary of the E. I. du Pont de Nemours Company and Imperial Industries Ltd., and furthermore with the dyestuffs, superphosphates and tartaric acid agreements.

In the electrical industry Canadian producers are financially interrelated with the principal electrical groups in Germany, United States, Great Britain, the Netherlands, France and Italy.² This applies particularly in the radio industry where a close relationship covering patents and markets exists between Canada, Great Britain, United States, Germany, France and the Netherlands.

Canadian producers, as subsidiaries, are, of course, represented in the world rayon cartel, which is, in reality, one of international trusts, and controls patents prices and markets. Certain

¹ Southard, op. cit., p. 170.

² For a detailed analysis of the relation, see, League of Nations Review of the Economic Aspects of Several International Industrial Agreements. pp. 65-76.

Canadian plate glass manufacturers are in a production agreement with Belgium, France and Holland. Wallpaper Manufacturers Ltd. of Great Britain has financial control of the wallpaper production in Canada while the Swedish Match Trust exercises a complete monopoly of Canadian match production. Other international combinations with which Canada is connected through financial relations with outside interests are to be found in the linoleum, tin, ferromanganese, woven wire and tobacco ¹. industries.

Flour milling, rubber, canned foods and nitrogenous fertilizers appear to be amenable to international cartellization as in each of them a few corporations control a high percentage of the production but they do not seem to be related in any apparent way with foreign interests. This is particularly surprising in the case of rubber as the Rubber Association of Canada, a strictly modern cartel formed seventeen years ago, comprises nearly all Canadian rubber manufacturers and fixes prices and production quotas.² Although the association has made definite statements to the contrary,³ it is possible that it is loosely connected by a secret agreement with the international pneumatic tire cartel, itself a rather secret organization as, beyond the knowledge of its existence no details concerning the agreement have been found. The "Eastern Canada Fertilizer Association" operates along the same lines as the rubber cartel but on a lower plane, its object being "to foster and encourage a better understanding in regard to the proper use and distribution of

¹. The British American Tobacco Company owns 4,091,418 out of a total of 9,451,032 ordinary shares of the Imperial Tobacco Co. of Canada. The latter is also linked up with the Tobacco Securities Trust Company of London, England. - Special Committee on Price Spreads and Mass Buying. Proceedings and Evidence (Ottawa 1934) pp. 1517-1518.

². Ibid, pp. 2151-2211.

³. Ibid, p. 2117.

fertilizers".¹ In the flour milling industry, four corporations control 78 per cent. of the capital of 1325 plants ². and the canned foods industry is in a similar state of concentration. And yet in none of these industries has affiliation on an international scale been attempted. The explanation is difficult to find but is probably related in some degree either to the legal situation regarding cartels in Canada, or to conditions peculiar to the industries in question, which only a detailed analysis beyond the bounds of this survey would reveal.

From the above rather rapid outline of the position of Canadian industries in international industrial combination it can be seen that Canadian producers personally are not members of many international cartels ³. but are affected by the policies of the latter through financial interrelations with American, English and Continental corporations. The future is, of course, an unknown quantity but if present indications may be taken as a basis for prediction, it seems safe to say that the movement will continue to be in the direction of the international trustification of Canadian industries as subsidiaries, largely of United States interests, rather than in the more rapid development of cartels. This prediction is based upon three facts (1) The position of Canada in the Empire stimulates the establishment of subsidiaries in this country in order that the latter might gain preferred access to Imperial markets. (2) The high tariff policy pursued by Canada since the war is a prominent factor in capital migration to this country. (3) Although cartels analagous

¹. Proceedings and Evidence, op. cit. p. 2068.

². Figures are for 1928-1929.

³. The most important are in the lead, zinc and aluminium industries.

to the Webb-Pomerene Export Association of the United States would probably be held legal under the present Canadian law, if they are to be encouraged, it would be necessary to create adequate administrative machinery to replace the cumbersome and ineffective methods now in force. Beyond this prediction it would be unwise to make any further statements regarding the probable future development of Canadian industries as related to the international cartel movement. It is only necessary to remember that their interest in the movement is none the less important for being largely indirect and that as a result any conclusions reached on the phenomenon as a whole will be as applicable to Canada as to the countries of Central Europe, usually referred to as the birthplace of international cartels. It is to these conclusions that we now turn.

Survey and Conclusion

There can be no doubt that international cartels are an established institution and they must be accepted as such. It is equally apparent that the system of free competition among unrelated units of production is dead and that a certain degree of planning and cooperation in the economic order is inevitable. Unless international cartels are judged in this light, any conclusions will be invalid as not pertaining to economic conditions as they actually exist. With this in mind, then, the essential characteristics of what may be termed a normal international cartel may be drawn together to form a basis for practical conclusions on the utility of the cartel institution to modern economic society.

(1) A normal international cartel, notwithstanding repeated statements to the contrary, forms an integral part of a long evolutionary process dating from the later middle Ages. In the course

of time only the technique of the movement has altered with the change in economic conditions. The process was of slow growth until the latter part of the nineteenth century when it was accelerated by the increasing intensity of capitalist business cycle fluctuations. The World War temporarily disrupted the movement only to give it a new impetus after 1918. To-day, while it forms a comprehensive fabric involving most civilized nations, it has not yet reached its peak. The world economic depression has undoubtedly solidified and strengthened the present form of the evolutionary process.

(2) A normal international cartel is a natural outgrowth of free competition which, in its advanced form, may be cited as the principal cause of the movement. All the contributory factors that have been cited in the preceding pages merely intensified, in one way or another, this fundamental and underlying cause from which international cartels sprang, not artificially as it appeared to Adam Smith, but naturally and inevitably.

(3) While the paradox "free competition means combination" is a truism, it by no means follows that cartellization means monopoly, at least in the modern and relative sense in which the latter term should be used. In other words, while a normal international cartel may be said to control competition, it does not necessarily constitute a tendency towards monopoly.

(4) Control of output, direct control of prices and division of markets are the three principal methods by which a normal international cartel seeks to remedy an unhealthy competition. The degree to which such methods can be successfully carried depends on several factors which must be present simultaneously for any degree of

success to be obtained. These factors include primarily, the stability of the cartel, the condition of the market, and the working policy of the organization. Each is of sufficient importance to warrant separate treatment.

(a) A modern international cartel is fundamentally unstable. This is the pivot about which all cartel discussions must necessarily revolve as, without internal stability, little in the way of concrete results can be achieved. The number which exhibit relative unity and internal strength is few and will often be found upon investigation to involve financial interrelations, a factor which automatically excludes them from the category of true cartels.

(b) Widely fluctuating and heavily adverse market conditions render theoretically sound stabilizing influences of an international cartel ineffective. The international copper cartel and steel entente are cases in point as each of these has proved utterly helpless before the downward trend of the present depression.

(c) The human element, evident in the working policy of a cartel, must reach a high standard of scientific perfection before stabilization is possible. It may be said however, that with a few exceptions such as the international copper agreement, this standard has been generally attained in most modern cartels.

This study has found very few international cartels that embrace these three factors favourably. The results of such a conclusion are widespread in their importance and will therefore be enumerated immediately.

(5) International cartels, with few exceptions, have not been successful in stabilizing either production or prices. There is ample evidence to show that fluctuations in the latter seem to be

inversely related to fluctuations in production. Wherever prices were highly flexible and allowed to sag during the depression, production tended to maintain itself, and wherever prices maintained themselves, production fluctuated wildly and sank to low levels. Hence, in general, the experience of cartellized industries in the past few years has not differed greatly from that of uncombined enterprises. The prices of mercury and copper, subjected to the strictest kind of control, have fluctuated as widely as merchant bars or zinc, which have only been subject to partial control, or as lead or flax which have been free from any restrictions whatever. Of course, where the aforementioned influences are combined favourably, as in the case of aluminium, inevitable exceptions occur, but, on the whole, little in the way of price or production stabilization may be expected from a normal international cartel.

(6) The possibility of an international cartel maintaining a monopolistic price level for any considerable length of time is very small. The reasons upon which this statement is based have been cited previously.

(7) This study has found in the normal international cartel a tendency towards (a) the prevention of a progressive deterioration of the wages and living conditions of labour, (b) a greater regularity of work than a non-signatory enterprise could furnish (c) a not-inimical influence towards trade union activities. Where unemployment has resulted, it has been found, upon investigation, to be due to the present faulty distributive system rather than to the economic consequences of international cartellization. Thus, up to the present at least, the growth of international cartels has been beneficial to labour.

(8) Costs efficiency and genuine rationalization, on the whole, have not been achieved by the normal international cartel. While tendencies in this direction theoretically result from cartellization, and while in some cases a certain degree of practical success has been achieved, general progress has been stifled by a repeated emphasis upon the maintenance of prices and the limitation of production.

(9) While overprotective tariffs provide an indirect but powerful impetus to the formation of international cartels, frequent changes in their scales of duty render the continued existence of the cartel insecure. The obvious implication to be drawn therefrom is that international cartels constitute a tendency towards the stereotyping of present tariff laws.

(10) Representative international cartels, in the majority of cases, have been successful in dealing with the problem of dumping, and, in so doing, have removed one cause for higher national tariff levels.

(11) While certain international cartels render tariff barriers impotent and unnecessary, this study is highly pessimistic regarding the possible lowering or disappearance of the latter before the advance of international cartels. Likewise, in certain fields only, is it possible to employ the tariff as a weapon against national price increases by domestic cartels. Where strong international cartels exist, this weapon is largely ineffectual.

(12) The problem of the relation which the normal international cartel will ultimately bear to the state cannot be solved with the existing knowledge either of private international law or of international cartels. An extra-legal system of central publicity combined

with as high a degree of national legal uniformity as can be secured will prove capable of bridging the transition period until an ultimate legal control is evolved. While the latter is not urgent at the present time, investigations with a view to its final attainment, which is undoubtedly necessary, should be instituted immediately.

(13) While normal international cartels tend to counteract competitive nationalism which constitutes the gravest danger to civilization at the present time, this tendency is not of sufficient strength to exercise any influence upon the broad problems of peace and war in either the political or the economic fields.

Thus has this study evaluated the separate characteristics of international industrial cartels. As units it is evident that they have been neither the selfish monsters as pictured by some, nor the economic panaceas as seen by others. Like most economic institutions they contain elements both good and bad and hence cannot be universally praised nor thoroughly condemned. They constitute an attempt to remedy certain disadvantages of the present economic evolution and in so doing inevitably intensify certain existing evils and create others. Whether or not society benefits from the change depends on the excess of advantages over disadvantages that the second system offers in comparison to that of the first. From this viewpoint there can be little doubt that international cartels as an institution constitute an advance in economic organization.

During the economic evolution of the past several decades competition in most trades has automatically and naturally assumed an anarchic and cutthroat character. Where cartellization has taken place this type of competition has largely disappeared. Producers have benefitted by the change or cartels would not have emerged.

The position of consumers has been improved as the economic evils of severe competition extend indirectly to all branches of the economic system. Thus it is almost a truism to say that while free competition constituted a foremost premise for the economic progress of the past, to-day controlled competition is a prerequisite without which economic life tends to become "nasty, brutish and short". Therefore there can be little doubt that, in this field, cartellization has been closely allied to the public welfare. As the maintenance of a monopolistic price level has been shown, with rare exception, to be impossible, there are no limiting circumstances surrounding the conclusion from this direction.

However, increased international industrial rationalization is a requisite to economic progress and while international cartels constitute a step in this direction, the results achieved have been of a somewhat limited character. Aside from the fact that internal cartel economies are not comparable to those arising from a large, financially unified production unit, it is possible, at first sight to condemn the cartel as it tends to keep alive expensively operating domestic industries and thus to run counter to Adam Smith's fundamental principle of the world division of labour. This opinion, of course, is true to some extent, but it neglects the fact that tariffs had already reduced world competition to a negligible quantity before the rapid growth of international cartellization set in, and it also fails to recognize that, especially in depression periods, modern international cartels aim at concentrating production where it can be most profitably conducted.

Thus, from a practical viewpoint, while the rationalizing influence of international cartels is undoubtedly limited, it cannot

stand alone as a target for serious criticism. This conclusion is strengthened when the possible alternatives to cartels are considered. Free competition, of course, is relatively useless as a world rationalizing influence. International trusts, likewise, while able to secure a higher degree of both internal and external economic coordination than cartels, imply the necessity of effective legal control to prevent consumer exploitation which is precluded from any concept of genuine rationalization. This legal control, as has been noted, is impossible to secure at the present time. Hence international cartels appear to be linked more closely with the public interest in this field than any possible alternative within the bounds of the present economic system.

Regarding the future, there seems little doubt that international combination will assume the form of financial interrelation rather than the amorphous cartel type of agreement. Natural capitalist development is in this direction and, at the present time, this has been augmented by the continued force of the world economic depression which has given combines an essentially defensive flavour. If it be assumed that the modern economy will survive the force of this depression and that society will return in large part to the status quo ante, then trusts will, in all probability, once again assume their inherently offensive character and increase in numbers more rapidly than cartels. If, on the other hand, it is impossible to accept such premises, it still appears safe to predict that trusts will play a larger part than cartels in the future as six years of depression has taught industrialists that stability is strength, and that such can only be secured by financial as well as cooperative unity.

One final word. Economics and politics in their practical applications are forces dominating the fundamental precepts of civilization itself. While the former has become international in outlook and scope, the latter, in its struggling competitive nationalism, still moves in medieval ways. Whether or not economics will remain on the path of enlightenment and progress depends upon whether the normal cartel will embrace the advanced concepts of this new phase of civilization, or whether, blind to its own interests and the just demands of consumers and wage earners, it will fall back into the ideas and methods of a primitive stage in economic evolution. Society should be vitally interested in preventing the latter and this will be possible in the future only if statesmen and public men will use the initiative in economic affairs that has heretofore remained the special privilege of private individuals, and at the same time will realize that society should cease to ignore a great transformation which is silently creating a new world.

APPENDIX

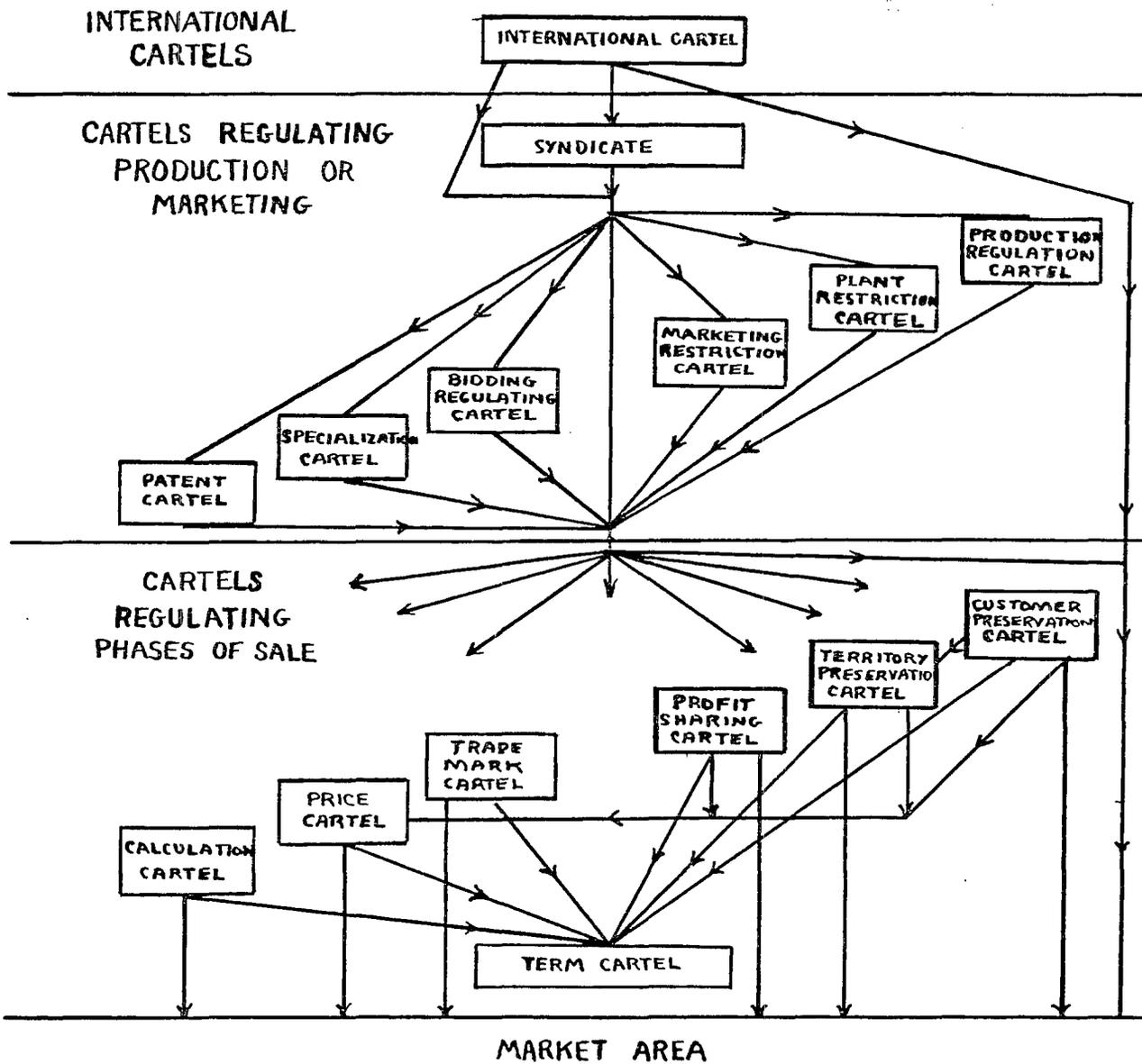


CHART SHOWING THE DIFFERENT REGULATORY FUNCTIONS OF NATIONAL CARTELS¹

¹For brief explanatory notes see following page.

BRIEF EXPLANATION OF NATIONAL CARTEL TYPES CHARTED ON PREVIOUS PAGE.

Term Cartels - Regulates the terms of sale which cartel members may grant to their customers.

Calculation Cartel - Determines the cost accounting method to be employed by the members in determining the price of their output.

Price Cartel - Regulates prices.

Trade Mark Cartel - Protects trade marks and prevents sale below a fixed price.

Profit Sharing Cartel - Distributes profits in order to avoid price cutting which, in the case of certain industries, merely shifts the demand from one enterprise to another, rather than increases the demand.

Territory Preservation Cartel - Protects the natural marketing areas of each member.

Customer Preservation Cartel - Protects the customers of each member.

Patent Cartel - Exchanges patents mutually among members.

Specialization Cartel - Each of the affiliated enterprises is assigned one or several products which it is to manufacture exclusively.

Bidding Regulating Cartel - Attempts to prevent the acceptance of unprofitable customer bids in specialized industries which produces to order.

Marketing Restriction Cartel - Allocates quotas to each member as to the quantity which it is permitted to market.

Plant Restriction Cartel - Prohibits the installation of new machinery and sometimes demands the shutdown of a certain percentage of machines.

Production Regulation Cartel - Imposes direct regulations upon the volume of production.

Syndicate - Central selling agency with authority to regulate the output of the affiliated enterprises.

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