CHAPTER II

The Rate of Interchange of Goods between Communities

§ 1

The Limits to the Rate at which the Goods of One Country Exchange for Those of Another

We have seen that differences in relative productiveness bring about trade between communities if there are no natural or artificial barriers or if these barriers are not unduly great; and that both communities concerned gain by such trade. How much each community gains depends on the rate at which the goods of one community exchange for those of the other. There are certain limits between which this rate fluctuates, and at a rate of exchange of goods beyond these limits, on either side, there would be no trade.

In showing what these limits are, we will again take trade between Ireland and Canada for illustration. We assumed that a week's labor in Canada would produce 20 bushels of wheat or 14 yards of linen. We saw, also, that if Canadians could get $1 a bushel for wheat, they would be willing to produce linen for $1.43 a yard, but not for less. Since Canadian wheat producers could buy this cloth at home for $1.43 a yard, they would not pay more than $1.43 a yard for linen cloth brought from Ireland. At a price greater than $1.43 per yard, they would cease to buy. If wheat is $1 a bushel, then

a price of $1.43 a yard for linen means that 1.43 bushels of wheat must be sold for each yard of linen bought. This, then, is one of the limits beyond which trade will not go. If Canadians have to give up more than 1.43 bushels of wheat to get a yard of Irish linen, they will lose by the trade; if less, they will gain by it, *i.e.* will get more cloth by exchanging a week's wheat yield for cloth than by devoting a week to cloth production. The same principle applies if the level of prices in Canada is higher or lower. Suppose Canadian wheat could be sold for $2 a bushel. Then the product of a week's labor, 20 bushels, would yield $40. Obviously, therefore, since a week's labor in linen production would yield, in Canada, but 14 yards, a price of $2.85 a yard would be required for its production there. In this case, it would pay Canadians to devote themselves to wheat production and sell their wheat at $2 a bushel, so long as they could buy linen abroad at less than $2.85 a yard. At this price or a greater, they would no longer gain. But we have merely restated our limit in terms of a new price level. At $2.85 a yard, Canadians would be parting with 1.43 bushels of wheat for each yard of linen. Whatever the price level, therefore, so long as 20 bushels requires, in Canada, the same productive effort as 14 yards, the limit beyond which Canadians would refuse to trade is 1.43 bushels per yard. At any less price of linen, Canadians would gain, and the lower the price, the greater the gain to Canada. The principle applies, also, if the trading countries have entirely different monetary standards. If Canada had an inconvertible paper money, there would still be some price in this money, for Irish linen, some amount of this money necessary to buy the foreign exchange or the gold to pay for

Irish linen. It would still be true that a yard of linen produced in Canada would cost 1.43 times as much as a bushel of wheat. If the amount of this money necessary to buy a yard of linen in Ireland should be more than 1.43 times the cost of a bushel of Canadian wheat, the linen would not be imported.

Beyond one limit, Canada would gain nothing and would, therefore, refuse to trade. Beyond the other limit, Ireland would gain nothing and would refuse to trade. The trade, if carried on, must benefit both, and will therefore lie between these limits.[1] Let us see what is the limit beyond which Ireland would not trade. If a week's labor in Ireland will produce 10 yards of linen or 6 bushels of wheat, and linen sells for $1 a yard, then Irish producers would be willing to raise wheat for $1.67 a bushel but not for less. Since the Irish linen manufacturing population can get wheat at home by paying $1.67 a bushel, to pay more for Canadian wheat would involve a loss. If linen is $1 a yard, therefore, Ireland will profit by purchasing Canadian wheat, at any price up to $1.67 a bushel. Beyond that price, Ireland will refuse to buy from Canada, preferring to produce the needed wheat at home. Similarly, if linen made in Ireland should sell for $0.50 a yard, Irish linen makers could be induced to produce wheat for about $0.83 a bushel, and that would, therefore, be approximately the limit to what Irish linen makers would pay for Canadian wheat. In other words, whatever the level of prices, the most that Irish linen makers would pay for a bushel of Canadian wheat would be 1.67 yards of

[1] Mill, *Principles of Political Economy*, Book III, Ch. XVIII, § 2. On the general theory of international values the mathematical reader may be referred to Edgeworth, "The Theory of International Values," *Economic Journal*, Vol. IV, 1894, pp. 35–50, 424–443, 606–638.

linen. At any less price they would gladly buy. At a more unfavorable rate, they would lose, and so would refuse to trade. We have found, then, the two limits to exchange. Between 1.43 bushels for 1 yard and 1.67 yards for 1 bushel, the rate of interchange must lie if there is to be any trade at all. 1.67 yards for 1 bushel is the same as 1 yard for .60 bushels. Therefore, the rate of trade must lie between 1.43 bushels = 1 yard, and .60 bushel = 1 yard. At either limit, all the gain from trade would go to one or the other of the two trading communities. Between these limits, the gain would be divided equally or unequally between those communities.

§ 2

Conditions of Supply and Demand Determining the Exact Rate of Interchange between these Limits

The question which has now to be answered is, what determines the exact rate of interchange — and, therefore, the gain to each country — between these limits. We shall find the determining factor to be relative intensity of demand, or, to use more familiar terms, we shall find the rate to be determined by supply and demand. Returning to our illustration, let us suppose that at a price of $1 a bushel for wheat and $1 a yard for linen, Ireland wants more bushels of wheat from Canada than Canada desires yards of linen from Ireland. In other words, Ireland's intensity of demand for wheat at these prices of wheat and linen, is greater than Canada's intensity of demand for linen. An excess of money would then flow into Canada and prices in Canada would rise, while in Ireland they would fall.[1] This would continue

[1] Throughout this book it should be borne in mind that the rise and fall may be only relative. There may be a general rise of prices, in which case Canadian

until a scale of prices was reached at which trade would be in equilibrium, *i.e.* at which Canada would buy as many dollars' worth of linen as Ireland would buy of wheat.[1] Let us suppose that this stage is reached when the quantity of money in Canada is $\frac{11}{10}$ of its former amount, and in Ireland (having smaller population, wealth, and currency, and being, therefore, affected through an inflow or outflow, by a greater per cent), $\frac{7}{8}$ of its former amount.[2] Then, by the quantity theory of money, prices in Canada would be some 10 per cent higher than previously. Assuming Canadian prices all to rise in this proportion,[3] Canadian wheat would sell for $1.10 a bushel.[4] Canadians would now be unwilling to make linen for less than $\frac{11}{14}$ of this, or $1.57 a yard. On the other hand, Irish linen would sell for

prices rise in greater degree than those of Ireland. Or there may be a general fall of prices, in which case Irish prices fall in greater degree than those of Canada. The important facts for our argument are the *relation* of Canadian to Irish prices and the changes in this relation. The discriminating reader will easily see that none of our essential conclusions are affected by the qualification here set forth.

[1] See Taussig, *Principles of Economics*, Vol. I. New York (Macmillan), 1911, pp. 496, 497. We are here assuming only two kinds of goods, linen and wheat, to enter into the trade.

[2] If the difference in intensity of demand is slight at prices of $1 per bushel and $1 per yard, it is conceivable that equilibrium may be reached by slight changes in the rates of exchange, insufficient to cause a flow of gold. A rate of exchange in Ireland, on Canada, slightly above par, and a rate in Canada, on Ireland, slightly below par, will slightly discourage Irish buying from Canada (or Canadian selling to Ireland) and slightly encourage Canadian buying from Ireland (or Irish selling to Canada).

[3] Since the goods imported from Ireland would not rise in price, but would fall, and since these goods must be handled, in Canada, by middlemen, other prices must rise by more than $\frac{1}{10}$ to make an average rise of that proportion. But if exchanging in Canada the goods brought from Ireland, forms but a small proportion of Canada's total internal trade (and it is not unreasonable to suppose this), then a rise in all other prices of not much more than $\frac{1}{10}$, would make an average rise of fully that.

[4] The circumstances which might prevent wheat from changing to the same extent as many other prices, are discussed in later chapters. For the present, these circumstances are assumed to be non-existent.

$\frac{1}{8}$ of its former price, or about $0.88. Irish workers could now be induced to produce wheat for $\frac{1}{8}^0$ of this, or about $1.46. This is cheaper than before ($1.67), but Ireland would still gain by consuming Canadian wheat, while Canada would gain more than before by purchasing Irish linen. Canada gets more for her wheat than before and pays less for her cloth, *because* Ireland's demand is the more intense. One bushel of wheat now gets $\$1\frac{1}{3}$, and $\$\frac{7}{8}$ buys a yard of linen. One bushel of wheat, therefore, now buys 1.26 yards. Ireland gains less than before, but the trade is still inside the limit of profitableness to Ireland. Ireland gives 1.26 yards for one bushel, while the limit of profitableness is 1.67 yards for one bushel. At the new rate of interchange, Canada may be induced to buy more linen and Ireland prevented from buying so much wheat. Where an equilibrium is found, there will be the rate of trade.[1]

Except as to relations of money prices, the conclusion is the same if the two countries engaged in trade have different monetary standards. If Canada, for example, had paper money not redeemable in gold, an excess demand from Ireland for Canadian wheat could not, it is true, increase Canadian money or Canadian prices; but it would, as we saw in an earlier chapter,[2] change the relative values of Irish and Canadian money, so that buyers in Ireland of Canadian wheat must spend more of their money for each bushel pur-

[1] Mill suggests that there may be several rates satisfying the conditions of equilibrium, *Principles of Political Economy*, Book III, Ch. XVIII, § 6. This might conceivably be the case if the trade were between two nations, each free of competition from others, and if few articles entered into the trade. In the complications of actual commercial relations, it is practically impossible that it should be so.

[2] See Part I, Ch. VI, §§ 7, 8.

chased, and so that Canadians could buy each yard of linen at a cost, in Canadian money, less than before. At some rate of interchange of wheat and linen, the trade would balance.

The rate would be determinable, also, if no money were used and trade were all in the form of direct barter. The country having the more intense demand would, as under existing forms of trade, offer a better rate.[1] We may, if we so desire, say that at present a trade between communities is resolvable into two trades, one of goods for money, and a second of money for other goods. If we so look at the situation, we may further say that each of the two trades, separately, illustrates the effect of relative intensity of demand. The country which is the more anxious to get the goods of the other will show a relatively great intensity of demand for money or gold, giving a comparatively large amount of its own products for a given sum of money; and it will then show its intensity of demand for the desired products of the other country by giving large amounts of money or gold for these.

In more familiar phraseology, we may say that the rate at which linen exchanges for wheat is fixed by supply and demand, and will be such a rate that the supply of wheat offered to Ireland by Canada is equal to Ireland's demand for wheat; otherwise stated, that the supply of linen offered to Canada by Ireland shall be equal to the amount demanded.

[1] The general principle, in fact, even when actual modern trade has been in view, has been frequently explained by economists without special reference to the flow of money. See, for example, Mill, *Principles of Political Economy*, Book III, Ch. XVIII, § 2; see also Bastable, *The Theory of International Trade*, fourth edition, London (Macmillan), 1903, p. 27. The flow of money has then, as in Mill, Ch. XIX of Book III, and Bastable, Ch. III, been brought under the general law.

§ 3

Effect on this Rate, when One of the Countries Offers a Variety of Goods in Trade, and also when it Receives Periodic Payments of Obligations from the Other

We must now modify our hypotheses, to make them conform more nearly to actual conditions. In trade between two countries, there are almost certain to be more than two commodities or services involved. Ireland, to recur to our illustration, will probably buy other things than wheat of Canada, possibly furs, timber, iron ore, etc.; while Canada is likely to buy other things than linen of Ireland. Then, even if, at $1 per bushel and $1 per yard, respectively, Ireland wants more wheat than Canada does linen, money does not necessarily flow to Canada, changing relative prices and the gains of trade. For Canada's desire to purchase other Irish goods may be intense enough to keep the relative distribution of money and the relative benefits of trade as they were.

In general, we may say that the more varieties of goods a country can offer for export, the better is its position in trade.[1] England's position, for example, is better if it produces several kinds of goods for foreign sale than if it produces but one. The demand of France or Italy or other countries for these several kinds of goods will be greater than for any one thing alone. As a consequence, there will be a greater tendency for gold to flow into England, making English prices higher and French, or other prices, lower, so giving England a larger gain from the trade. The more largely English merchants and manufacturers can introduce English

[1] Mill, *Principles of Political Economy*, Book III, Ch. XVIII, § 6.

goods into favor in the Orient, in Africa, in South America, or elsewhere, the greater is the gain, not to these merchants and manufacturers alone, but to the English nation. Among the goods that England is in a position to offer, must, of course, be included banking service, freight service, etc., as well as commodities. The fact that other countries desire to make use of her ships is as much a help toward making trade more profitable to England as the fact that other nations desire to buy her manufactures.

In a similar way, England is helped by the fact that her people have large investments abroad, on which they receive interest, dividends, etc.[1] According to the principles set forth in Part I, Chapter V,[2] this means flow of gold to England, higher prices there, lower prices where the money comes from, and, consequently, a flow of money back again from England. In the long run, England receives interest in the form of goods rather than of money. The money tends to flow back until the normal equilibrium is restored. But if England has relatively permanent investments, say in the United States, and is therefore receiving interest and dividend payments from the United States for many years in succession, the normal equilibrium of prices probably will not, during all that time, be reached. As fast as this equilibrium is approached, further interest and dividend payments upset it. For a great many years, therefore, English prices are likely to be somewhat higher, and American prices somewhat lower, than would be the case if Americans owed nothing. During this period, then, England will get somewhat more for English goods

[1] Taussig, *Principles of Political Economy*, Vol. I, p. 499. [2] § 8.

and pay somewhat less for American goods, than otherwise. The rate of interchange is slightly more favorable to England than it would otherwise be. Even assuming all trade to be carried on in the form of barter, this conclusion would still hold true. For if England were getting continuous interest in American goods, English desire for such goods would be partly satisfied, their utility to the people of England would be less (law of diminishing utility), and they would have to be offered at a less value in terms of English goods.[1]

On the other hand, England's advantage in the rate of trade, due to payments of interest, etc., which have to be made to Englishmen, must be regarded as an offset to a corresponding disadvantage in the rate of trade, during the period when the investments (on which interest, dividends, etc., are being received) were made. During the period when England's (or any country's) annual investment abroad exceeded her annual profits from abroad, the tendency was for gold to flow from England to other places. This tended to make prices elsewhere higher, and English prices lower, to give other countries, for the time being, a more favorable rate of interchange of goods with England. A country whose people are making large investments abroad, then, will have to dispose of its goods, for the time being, at a *less* favorable rate; but it will later, during realization of

[1] The law of diminishing utility is the fundamental explanation of England's gain in our illustration, even if money is used. Were it not for the law of diminishing utility, no change, or no appreciable change, in relative price levels would be required to bring about the flow back, for goods, of the money paid in dividends, etc. The flow back would begin to take place before the flow of money into England had appreciably changed the price level there or here, and would take place, therefore, without making the rate of interchange of goods appreciably more favorable to England.

profits and repayment, be able to dispose of its goods at a *more* favorable rate.[1]

§ 4

Influence on Trade and the Rate of Trade of Production in any Country under Conditions of Different Cost

Up to this point, we have assumed the commodities entering into trade to be produced at constant cost per unit, regardless of the amounts produced. But such is by no means always the case. Let us revert to the instance of Ireland trading with Canada. One week's labor in Ireland was supposed to produce 6 bushels of wheat. As a matter of fact, all land is not alike in fertility or in convenient access to market. While, therefore, it might be true that, if Ireland produced all her own wheat, one week's labor at the margin of cultivation (that is, on those lands least favorable to wheat production of all the lands so used, but which must be devoted to wheat production, to secure an adequate supply) might produce but 6 bushels; a week's labor in other parts of Ireland would perhaps produce a great deal more. If Ireland produced all her own wheat, the people of Ireland would have to produce it, perhaps, on unfertile lands and where the conditions of production were relatively unfavorable. It might, therefore, be uneconomical for Ireland to produce her own entire

[1] Since investment is really, in large part, a purchase of capital goods, *e.g.* railways, farms, factories, etc., it may be asked why the general discussion regarding the trade of the goods of one country for the goods of another does not cover investment also. But investment is rather the purchase of rights in goods which are not themselves moved. The capital purchased remains in the foreign country and yields *future* income to the distant investors. This yielding of future income, involves a later and opposite influence on the rate of trade between the countries, which does not occur when the owners and the capital owned are in the same place. Hence, special consideration must be devoted to the effects of lending and investing, on trade.

supply of wheat. Some wheat should rather be imported from Canada. But it might well be profitable for the people of Ireland to employ some of their more fertile land, if not better situated and adapted for other crops, in wheat production.[1] The possession of this more fertile land would lessen the intensity of Ireland's demand for Canadian wheat, and would thus tend to make the rate of trade between the countries more favorable to Ireland than if her entire supply of wheat had to be secured from abroad. If linen sells for $1 a yard and Canadian wheat is $1 a bushel, then it is of course more profitable for Ireland to buy Canadian wheat than to produce wheat on poor Irish land, under intensive cultivation (*i.e.* with but small areas of land for each unit of labor), where a week's labor can only produce 6 bushels, and where it can only be remunerated by a price of $1.67 a bushel. But it would be profitable for Ireland to produce wheat for home consumption on land where a week's labor would yield 14 or 13 or down to 10 bushels, unless this land, or part of it, was so situated and adapted as to yield still more from some other use, *e.g.* from being used to raise potatoes. A yield of 10 bushels a week would require only $1 a bushel (linen being $1 a yard), to induce wheat production in Ireland, and so to raise the wheat, would, by our hypothesis, be as economical as to import it from Canada. On land yielding 7, 8, 9, or less than 10 bushels a week, wheat production in Ireland is uneconomical as long as a yard of linen cloth will buy from Canada a bushel of wheat. So it results that, because of the law of diminishing returns, it is often most profitable for a country to produce, in part, its desired supply of some commodity, and import the rest. If the

[1] Bastable, *Theory of International Trade*, pp. 29 and 30.

demand for wheat in Ireland became greater, poorer Irish sources of production would perhaps be resorted to for a small part of the supply, while somewhat more would be imported from Canada and elsewhere at the higher price, relative to linen cloth, resulting from this greater demand.

By similar reasoning it may be shown that beyond a certain point of high cost, wheat production in Canada for export would not be carried, but that the people of Canada would prefer to devote themselves, in part, to other work, even to the manufacture of linen. Canadians would not carry wheat production to land so poor (assuming a great increase in population) as to yield less than 14 bushels a week, so long as 14 yards of linen could be produced in a week's labor; for, beyond that point, it would pay better to produce linen at $1 a yard than wheat at $1 a bushel. Growing density of population tends, in general, to the spread of manufacturing, because employment in agriculture, after a certain degree of intensiveness of cultivation has been reached, becomes less profitable at the margin the more persons are engaged in it.

It has been the good fortune of the American people that they have lived in a country not overpopulated and one of very considerable natural resources. They have had always, therefore, the opportunity to engage in the extractive industries, particularly in agriculture, and realize large returns in so doing. They have not had to take up manufacturing, however small the profits, merely for the lack of a profitable alternative, though they have found it worth while to engage in various lines of manufacturing industry which American resources or American methods make especially productive

in the United States. If other countries, such as England and Germany, are forced by dense populations and limited resources to engage in manufacturing to a greater relative degree, Americans have, on that account, no reason for envy, nor any reason for attempting, through tariffs or other arbitrary interferences, to force American industry more largely into parallel channels.

§ 5

Extension of Hypothesis so as to Include Trade Involving More than Two Countries

As we broadened our first hypothetical conditions so as to include more than two kinds of goods, we shall now further broaden them so as to consider more than two trading communities. We have assumed Ireland and Canada to be engaged in trade with each other. But trade may be three-cornered or four-cornered or more. Ireland may sell its linen chiefly to the United States instead of to Canada; the United States may sell cotton to Canada; and Canada may in turn export wheat to Ireland. Under these circumstances, the rates of interchange would still depend on relative intensities of demand. The rate at which Ireland can exchange linen for wheat, depends on the price which can be realized, in the United States, for linen, and the price which must be paid, in Canada, for wheat, or upon the intensity of American demand for the linen compared to the intensity of Irish demand for the wheat. The American demand for the linen, at any price, will depend, in part, on what Americans can get for cotton. The Canadian demand for cotton will depend, in part, on what Canadians can get for wheat. If Ireland has a surplus de-

mand for wheat at $1 a bushel, gold will flow to Canada and Canadian prices will rise. Canadians may then buy more cotton, in which case American prices will rise. Irish prices will fall, and Americans will probably buy more linen. When equilibrium is reached, Ireland will be paying somewhat more for wheat and getting somewhat less for linen. The United States will probably be getting somewhat more for cotton and will be paying somewhat less for linen. Canada or the United States or both will gain more from the trade, and Ireland will gain less. As in trade between two countries, equilibrium will be reached at a set of relative prices or values which equalizes supply and demand.

How are the commercial interests of three nations affected by the entrance of the third into trade with the other two? The general effect will be an increase of prosperity, and it is entirely possible that each of the three countries will gain something. Suppose, to take a seemingly most unfavorable case, that France enters a trade previously confined to Ireland and Canada, as a competitor of Ireland, competing with the last-named country in the sale of linen to Canada and in the purchase of wheat from Canada. In so far as France engages in this trade and no other, Ireland is deprived of a part of her former gain; but there is no net loss, for France and Canada together gain as much as Ireland loses, or more. In consequence of the competition of France, linen will fall in price, or wheat will rise, or both, so that a yard of linen buys less wheat than before. So far as Ireland still engages in the trade, at the new and, to her, more unfavorable rate of interchange, Canada gains, besides her former profit, precisely what Ireland has ceased to gain. So far as Ireland is driven out of the

trade by the entrance of France, France gains at least as much trade as Ireland loses, though at a rate of interchange somewhat more profitable to Canada and somewhat less so to France, than would be necessary were Ireland's competition absent. So far as France loses through the less favorable rate of interchange caused by Ireland's competition, Canada gains. If the result of the competition is a larger trade for Canada with the other two countries than Canada previously had with the one, as well as a more favorable rate, then Canada gains more than either of the others loses or than both lose; for Canada's greater gain on the same trade as before, at the better rate, makes up for the lessened gain of the other or others; while the additional trade, which must be at least worth having to the other country or countries, else it or they would not trade, is a very considerable gain to Canada. The competing countries, therefore, though they may hurt each other, will benefit by at least as much, and probably by more, the country or countries for whose trade they compete.

If, now, besides competing *against* Ireland in the trade with Canada, France also enters into trade *with* Ireland, both Ireland and France may gain from this trade as much as, or more than, they are losing by their competition. Then the entering of France into trade relations with the other two countries will benefit Canada, Ireland, and France. It seems a perfectly fair statement, therefore, that the more widely trade is voluntarily, and without governmental encouragement, extended, *i.e.* the more countries enter into it, the greater is the total gain; and that there is reasonable hope for a greater net gain to all countries concerned. In no case can the entrance of an additional country or community

cause a country or community already engaged in a trade, to engage thereafter in a losing trade. It has already been explained that unless a trade yields a gain to both (as, of course, to all, if more than two) countries concerned, the trade will not take place. The most that the new competition can do is to decrease this gain for the country or countries on one side of the trade. And, as above pointed out, the countries which lower each other's gains by competition for the trade of a third country, may increase each other's gains by trade with each other.

Any country gains more, the more numerous the other countries which desire its products and the more numerous the other countries which have goods to offer it. On the other hand, the competitive entering of many countries into trade makes it impossible for any one country to gain so extreme a share of the advantage in trade with another as otherwise it might. The one country will seldom have a monopoly of the production of goods needed in the other and will seldom be the only place where the other can sell its products. Alternative markets will generally be available, and the gains of trade are therefore likely to be more nearly equal between two trading countries. It is for these reasons that the policy of European nations, in early colonial days, of restricting the trade of colonies with other than their respective mother countries, might be advantageous to the mother countries, but was at the same time disadvantageous to the colonies.

§ 6

Cost of Transportation as Related to Trade

Cost of transportation is a factor influencing trade, which must be considered before our discussion is complete. This cost subtracts from the gains of trade the amount necessary to remunerate those engaged in carrying the goods. The principles determining how much gain is realized by each country are, of course, unaffected. Trade which cannot yield enough to pay for transportation simply does not take place, unless it is artificially stimulated, as by government bounties.

§ 7

Summary

In this chapter we have confined our attention almost entirely to the rate of interchange of goods between trading communities and countries. We have seen that, in the case of trade between any two countries, the rate at which the goods of the one exchange for the goods of the other cannot lie beyond either of two limits, at the one of which the one country, and at the other of which the other country, gains nothing from the trade. Between these limits, the exact rate is fixed by the comparative intensity of demand of each country for the goods of the other, or, to use familiar terms, by supply and demand. Whether gold is a common standard of value, or the currencies unrelated, or the trade direct barter of goods for goods, the rate of interchange will be fixed where intensities of demand balance.

A country is the more likely to get a large share of the total gain resulting from its trade with another

country or countries, the greater the variety of goods it can offer to stimulate the desire of the other country or countries to trade. In like manner, a country to which payments have to be made by other countries, *e.g.* of interest and dividends, is in a position to get, in consequence, more favorable rates of interchange, though such a country may have had, previously, during the period of its investing operations, somewhat less favorable rates.

The assumption first made that each country would buy of the other the goods securable most cheaply from the other, was explained and qualified to conform with the fact of differing cost of production of any good, within the same country. It was pointed out that a country might produce for itself a certain amount of a desired kind of goods, from its most favorable sources of supply, or up to the point where further home production would involve uneconomical employment of its labor and capital; and that beyond that point it would import.

Our assumptions were further broadened to include trade involving more than two countries. Three-cornered trade was alluded to, and it was shown that the influence of comparative intensity of demand is of determining force in this case and likewise in cases involving still more countries. If a third country (or a fourth or fifth) enters into a trade previously confined to two countries (or three or four), the result will be a greater total prosperity, although if the third country enters the trade only as a competitor of one of the others, that one may find its gains somewhat reduced. If each trades with each of the others, there is a reasonable prospect for increased prosperity to all three. Any country, however, is prevented by the entrance of other countries

into competition with it from realizing exorbitant profits at the expense of the countries it trades with. On the other hand, any country gains the more from trade, the larger the number of other countries which compete with each other in buying from and selling to it.