17
International Trade and Colonies

17.1 BACKGROUND

The new theories of value developed in the 1870s did not result in any dramatic changes in the theory of international trade and the empire. Two reasons suggest themselves. The first is that because of concern with the question of the gains from trade, real cost theories of value, with their associated welfare implications, continued to be used. As a result the labour theory of value survived, albeit in a modified form, in international trade theory into the twentieth century. The second is that the dominant influence was that of Mill, whose theory of reciprocal demand was completely compatible with the new theories of value, for it described a general equilibrium of supply and demand.

17.2 THE PURE THEORY OF TRADE, 1870–1914

Developments within the classical tradition

In the period after 1970 a number of economists worked to extend and to develop the Ricardo–Mill theory from within the classical tradition. The first important contributor was Cairnes (1874). Cairnes accepted the main elements of Mill's theory, seeing comparative costs as explaining why countries trade, with reciprocal demand determining international values within the limits set by comparative costs. He departed from Mill, however, in important respects. Firstly, he made it clear that the costs relevant to comparative advantage were the subjective sacrifices involved, these comprising both labour and abstinence, though in practice labour costs alone provided an acceptable approximation. Cairnes carefully examined the relationship between comparative costs, calculated in this way, and relative prices. Secondly, because Cairnes extended Mill's theory of reciprocal demand to cover not simply trade, but exchange between non-competing groups within a country, he had to modify the Ricardian theory of comparative costs accordingly. The reason was that whereas for Ricardo and Mill relative prices within a country corresponded to relative costs, this would not be so if competition were imperfect. When they differed, it was relative prices, rather than relative costs, which had to be used in calculations of comparative advantage and trade flows.

It follows from this that, although a staunch defender of the classical theory of value, Cairnes greatly enlarged, albeit emphasizing imperfections of competition, the role of demand. The importance of demand came out in
his discussion of the effects of increases in wages. Where effective competition prevailed, Cairnes followed the Ricardian view that a rise in wages would not affect the volume of trade; its effect would be to lower profits, leaving costs unaffected. Outside the limits of effective competition, however, whilst a uniform change in all wage rates would not affect trade, a change in wages within one non-competing group could affect trade. The mechanism was as follows. A fall in one industry’s wages, assuming its workers do not compete directly with workers in other industries, would reduce that industry’s costs and prices causing an increase in its exports. Depending on the elasticity of demand for these exports the export revenue might rise, fall or stay the same, any change in export revenue producing a trade imbalance, and hence gold flows. These gold flows would alter the relative price levels of the countries concerned, as a result of which relative wage levels would be brought back into equilibrium. Whether or not the outcome of this process was a net increase in trade as a whole depended on elasticities of demand for the industry concerned and for other industries.

A later writer to develop Mill’s theory along classical lines was Bastable (1897). He continued to use comparative costs, though measuring these not in terms of labour or sacrifice but in units of productive power: “a given amount of labour, working with an average amount of capital, and thus producing a definite amount of a commodity”. Like Cairnes he discussed non-competing groups and analysed the effects of variations in the elasticity of demand. Where he went further was in bringing in non-constant returns to scale. Variations in demand might, for Bastable, alter comparative advantage by changing relative costs. A similar position was held by Taussig (1911, 1927), the dominant figure in trade theory, especially in the United States, in the early twentieth century. His position was fundamentally a classical one as modified by Cairnes and Bastable. His exposition had, however, the advantage of greater clarity.

Mill’s critics

The Ricardo–Mill system was subject to criticism from several economists. McLeod (1872) and Cliffe Leslie (1879a) criticized the distinction between home and foreign trade, arguing that the same principles must apply to both, an argument effectively met by Cairnes’ application of reciprocal demand to home trade between non-competing groups. Leslie went on to argue that lack of information caused numerous discrepancies between actual incomes and prices. These were, however, criticisms from economists hostile to classical economics. An example of criticism by a follower of classical economics can be found in Sidgwick’s Principles of Political Economy (1883). Sidgwick argued that the peculiarity of international trade was not factor immobility but distance. He came to the conclusion that limits to international relative prices would be set not by comparative costs but by home costs with and without the double cost of transportation. The exact position of prices within this range depended on how the two countries shared the costs of transportation.
Characteristic of all these criticisms was their failure to provide a fundamental challenge to the Ricardo–Mill orthodoxy. They were all criticisms which could be passed over as missing the main point of the Ricardo–Mill theory. Sidgwick was concerned with a more limited problem: the division of the costs of transport, rather than the gains from trade. Of the criticisms offered by McLeod and Leslie, some were incorrect; others raised much wider issues.

Mathematical extensions of the Ricardo–Mill system

Of more significance were attempts by economists to analyse the Ricardo–Mill system mathematically. The most important was that of Marshall (1879) who analysed Mill’s reciprocal demand using offer curves. His theory, however, was not for some time published, being merely circulated, by Sidgwick, to a limited number of economists. The first actual publication of his offer curves was in Italian, in Pantaleoni’s Manual of Pure Economics (1889).

Though Marshall described these as demand curves they were very different from the demand curves used by Marshall in his theory of domestic values, for they were not partial equilibrium constructions describing demand for a single commodity on the assumption that the prices of all other commodities remained unchanged, but were general equilibrium constructions drawn on the assumption that changes in trade were accompanied by readjustments in domestic production. This was made clear by Edgeworth who at one point described an offer curve as a “supply and demand curve”. Offer curves were effective in clarifying several aspects of the Ricardo–Mill theory, in particular the analysis of stability and changes in cost conditions. They could also be used to analyse the effects of tariffs and, when combined with indifference curves, as was done by Edgeworth, to draw conclusions about welfare. Marshall’s offer curves thus provided a useful means of expounding the Ricardo–Mill theory, but without altering its substance.

An alternative mathematical approach was to apply to international trade the Walrasian method of general equilibrium, as was done by Pareto (1896, 1906). Pareto, however, failed to get beyond the counting of equations, adding little of real interest. He was, however, able to make the notion of sacrifice more precise, relating it to opélimité, or utility. He criticized the classical economists for being imprecise in their definition of costs.

17.3 THE PURE THEORY OF TRADE: THE INTER-WAR PERIOD

Graham

It was the inter-war period which saw the first serious challenge to Mill’s theory of international values, this coming from Graham (1923, 1932). He attributed the errors of those following Mill’s approach to
Mill's dictum, too slavishly accepted by his followers, that trade among any number of countries, and in any number of commodities, must take place on the same essential principles as trade between two countries and in two commodities. 19

Results drawn from the two-country–two-commodity case had, according to Graham, "no application to reality." 20 He adduced a variety of reasons for this. 20 (1) When there are more than two commodities or more than two countries comparative advantage ceases to be something dependent on cost conditions alone, but depends on the actual terms of trade: if the terms of trade change a country may import and export different commodities. This was a well-known point, discussed by, for example, Edgeworth. (2) When there are more than two countries demand conditions change dramatically: the existence of alternative sources of supply makes demand for an individual country's product more elastic. (3) A large number of countries and commodities means that the limits to variations in international values set by comparative cost become narrower. (4) It becomes inappropriate to assume that two countries' demands for each others' products will be of the same order of magnitude. Consider, for example, English matches exported in return for German cloth: it is likely that within the limits set by comparative costs German demand for matches will be very small relative to English demand for German cloth, with the result that their relative price will be set by comparative costs in England, all the advantage from trade accruing to Germany. 21

Using this approach Graham was able to re-evaluate many of the conclusions reached by Mill and his successors. 22 Fundamental to his argument was his claim that

the terms of international exchange are established not in the way posited by the neoclassical school [Mill and his successors] but through the play of indirect, or "linked", competition, on the basis of opportunity cost. 23

Though going beyond the Ricardian theory in analysing multi-commodity, multi-country exchange, and in analysing much more thoroughly the interplay of supply and demand, Graham was thus restoring the Ricardian approach to trade theory. His objection was very much to Mill's theory of reciprocal demand, which, unlike Ricardo's comparative advantage. Graham believed, did not take account of each country's internal production conditions. It is for this reason that Haberler described Graham's approach as "ultra classical". 24 It was not until Meade's work in the 1950s that the link between internal production conditions and offer curves was made explicit.

Heckscher and Ohlin

An alternative approach to the pure theory of trade originated, under Wicksell's influence, in the work of two Swedish economists, Heckscher (1919) and his pupil Ohlin (1933). 25 Heckscher's purpose was to analyse the effects of trade on the distribution of income between factors of production, to do which he had to explain why comparative costs differed between countries. Making the assumption, which distinguished his theory from the classical theory, that "the same efficiency" prevailed in both countries (that
they both had access to the same technology. Heckscher came to the conclusion that differences in comparative costs arose due to differences in the relative scarcity of factors of production. A country where labour, for example, was abundant would have a comparative advantage in relatively labour intensive products. This framework enabled Heckscher to argue that trade tended to even out the scarcity of factors of production among countries. Through exporting commodities which used a country’s relatively abundant factor, and importng those which required large amounts of its relatively scarce factor, demand for abundant factors would be increased and demand for scarce factors reduced. Heckscher claimed that where the same technique was used in two countries, trade would expand until relative factor prices were equalized. This tendency to equalization would partially be offset, however, if there were any scope for factor substitution, in which case equalization of relative factor prices would be only partial. Where different techniques were used, both absolute and relative factor prices would differ between countries, such differences explaining the migration of capital and labour.

Ohlin, through whose book *Interregional and International Trade* (1933) Heckscher’s ideas became known to the English speaking world, adopted substantially the same position. He found explanations of differences in comparative costs, and hence of trade, in differences in factor endowments, and he found that trade would lead to a partial equalization of factor prices. There were, however, important differences between the two treatments. (1) He made explicit the general equilibrium nature of his theory, describing inter-regional equilibrium in a system of equations analogous to Cassel’s system for a single region. (2) He pointed out that trade could be caused not only by differences in factor endowments, but also by differences in demands, and by gains through specialization where there were increasing returns to scale. (3) He provided a discussion of dynamic aspects of trade and factor pricing, including international factor movements and changing factor supplies.

Ohlin presented his theory as an alternative to the orthodox theory. Referring to Pareto’s theory, of which his was a development, he wrote, “Pareto did not bring some minor modifications of the classical doctrine, but attacked the problem in an entirely different way.” Ohlin criticized Pareto for not formally rejecting the Ricardian doctrine, for he argued that by measuring comparative costs in terms of marginal utility instead of labour costs, Pareto had fundamentally altered the Ricardian theory. Despite Ohlin’s view, however, it can be argued that it is the opportunity cost aspect of the Ricardian theory which is fundamental, and that the labour theory of value, with which Ohlin disagreed, was a subsidiary feature. Given this, Ohlin’s theory appears as a development of, not an alternative to, classical theory.

**Opportunity cost**

The third approach to the pure theory of trade to emerge in the inter-war period was that stemming from the work of Haberler (1930, 1935). Like
Ohlin, Haberler was concerned “to display the Theory of International Trade as a constituent part of the modern doctrine of economic equilibrium”.

He started from Ricardo’s comparative cost theory, but instead of rejecting it he argued that the labour theory of value, from which Ricardo had derived relative costs, could be replaced with the concept of opportunity cost. To do this he introduced what he called the “substitution curve” (the production possibility frontier, or transformation curve) which described the rate at which commodities could be substituted for each other in production, without bringing in any specific theory of costs.

In a series of papers in the early 1930s this approach was developed into the geometric version of trade theory that is found in modern textbooks. Viner in 1933 combined Haberler’s substitution curve with indifference curves. The nature of such an equilibrium was further investigated by Lerner (1932, 1934) and Leontief (1933), the latter using the theory to derive Marshall’s offer curves, and explaining, without using either real or labour costs, the effects of factor endowments and demand conditions on trade.

17.4 THE TRANSFER MECHANISM

Bastable and Nicholson

In the closing decades of the nineteenth century discussion of the transfer mechanism was stimulated by a number of works analysing the terms of trade between England and India, arguing that the large sums paid to England on “extra-commercial accounts” had turned the terms of trade to India’s disadvantage. Many of these writings relied on Mill’s version of the price-specie-flow mechanism: starting from a position of internal and external equilibrium, a unilateral transfer would, through causing specie to flow into the receiving country, raise its prices relative to those in the paying country, this resulting in an excess of imports over exports. This view was challenged by Bastable and Nicholson, both of whom argued that transfers were effected through changes in incomes.

Bastable claimed that Mill had omitted to allow for the effect of the transfer on incomes. Even without any multiplier effects, and these were absent from the discussion until the 1930s, a transfer payment would cause a once-for-all increase in the receiving country’s income. This would, independently of any specie flow or changes in prices, cause the creditor to demand more imports. If this effect is sufficiently large there will be no need for any change in relative prices: “The inhabitants of the [creditor country], having larger money incomes, will purchase more at the same price, and thus bring about the necessary excess of imports over exports”. Indeed, in actual circumstances, where there are many countries and many commodities, competition will fix the terms of trade between relatively narrow limits, preventing the price changes on which Mill’s mechanism relies.

Despite such a clear account, however, Bastable never fully integrated this with the rest of his work on trade and foreign exchange.

Bastable’s theory was taken up a few years later by Nicholson (1897),
who improved on it in several ways. In addition to the receiving country's increase in income, Nicholson brings in the loss of income in the paying country:

The government of the paying country must levy taxes to the amount of the annual tribute, and thereby will diminish the consuming power of the people by so much. Assume that, in the first place, actual money is taken from the pockets of the people. We may suppose that in consequence there will be partly a lessened demand for imports and partly an excess of home commodities available for export. At the same time the receiving country - when the money is sent to it - will have so much more to spend and can take more imports and also consume things formerly exported. In this way an excess of exports from the paying country equivalent to the tribute can be brought about without any change in prices.\textsuperscript{40}

Though aware of problems which might arise, Nicholson is making it clear that transfer can be effected without any change in prices. The issue is how quickly the relevant adjustments take place.

Though Bastable and Nicholson saw themselves as challenging an established orthodoxy,\textsuperscript{41} they were in fact arriving at conclusions reached in the first half of the nineteenth century by economists, from Foster to McCulloch and Cairnes, concerned with the effects of Irish absenteeism.\textsuperscript{42} The quotation from Nicholson might well have come from one of these earlier writers.

\textit{Taussig}

Despite the work of Bastable and Nicholson, however, the price-specie-flow approach remained dominant, its outstanding exponent being Taussig, whose article "International trade under depreciated paper. A contribution to theory" (1917) prompted widespread discussion. Though concerned with a different financial situation, Taussig's theory was fundamentally the same as Mill's: a transfer would raise prices in the receiving country relative to those in the paying country, the resulting "bounties" on exports and imports producing the required trade balance.\textsuperscript{43} Taussig did consider the case where neither specie flows nor price level changes were required, but he dismissed it as "extremely rare", occurring mostly in cases where loans were, as part of a "neo-mercantilist" policy, tied to exports from the lending country.\textsuperscript{44}

One result of this paper was a re-statement, by Wicksell (1918) and J. H. Hollander (1918), of the classical mechanism. This is done most clearly by Wicksell who, considering two countries whose prices cannot vary, concludes:

The stimulus to these altered conditions of trade is not to be found in a difference of prices in the two countries, [ruled out by the assumptions]; the increased demand for commodities in one country, the diminished demand in the other would in the main be sufficient to call forth the changes alluded to.\textsuperscript{45}

The other result of Taussig's article was a series of PhD theses by his students, each studying the balancing mechanism for a particular country at
a time of large capital transfers. Examples of these are Viner's *Canada's Balance of International Indebtedness* (1924a), and J. H. Williams' *Argentine International Trade under Inconvertible Currency, 1880–1900* (1920). It was in the light of these studies that Taussig wrote:

One thing, however, stands out from the British phenomena ... the unmistakably close connection between international payments and the movements of commodity imports and exports. And this closeness of connection is found again and again in other countries also.46

There was, however, a puzzle, for imports and exports moved surprisingly fast, "almost as if there were an automatic connection between these financial operations and the commodity exports and imports". The intermediate stage, predicted by the Thornton-Mill theory, involving gold flows and price changes, was hard to find, and if it was there it was certainly extremely short. Taussig did not, however, abandon the theory: "I find it impossible to see how there can be a complete skipping of the intermediate stage -- anything in the nature of an automatic connection." The evidence remained, for Taussig, a puzzle.

**Keynes and Ohlin**

The transfer problem was brought into prominence in the inter-war period by the question of German reparations payments, required by the treaty of Versailles: could Germany afford to pay reparations on the scale demanded. In addition to the issue of whether sufficient money could be raised, by taxes or other means, within Germany (the so-called budgetary problem) there was the transfer problem, the issue of whether any financial payments could be translated into an export surplus. Rather than consider the controversy in detail47 we will concentrate on one episode where theoretical issues emerged very sharply: the exchange between Keynes and Ohlin in the 1929 *Economic Journal*.

Keynes argued that the budgetary problem was solved, for Germany was by 1929 already paying enough taxes to cover reparations. He was doubtful, however, as to whether it was possible to translate this into an export surplus. The reason was that although Germany was capable of increasing the supply of exports, these could be sold abroad only if their price fell sufficiently to increase demand. The problem as Keynes saw it lay with the elasticity of demand: the value of exports had to be increased by 40%. Because the Allies refused to let Germany devalue, an enormous reduction in domestic prices and costs was required.48 Indeed, if the elasticity of demand were less than unity it would be impossible for Germany to produce an export surplus.49

Ohlin's response to this was to argue that Keynes had neglected the direct effects of reparations on buying power, and hence on the balance of trade. Suppose country A borrows (or receives as a gift) 100m marks from country B. A fraction (say 20m marks) will be spent on imports, the remainder being spent on domestic goods. Keynes, in the tradition of
Taussig, stressed that this would produce only a part of the required balance of trade adjustment of 100m marks, the remainder being produced through price changes. Ohlin, in contrast, took up an argument made earlier by Viner to the effect that this 80m marks spent on domestic goods would lead, through attracting resources away from export and import-competing industries, to an import surplus of 80m marks additional to the initial 20m. Though there would be price changes internally, the required surplus would thus be produced independently of any change in the terms of trade. Ohlin thus saw the transfer problem as much less of a problem than Keynes.

Conclusions

In these disagreements over the transfer mechanism a variety of issues were involved. One cause of difficulty was that the advocates of the demand transfer mechanism separated changes in demand from changes in the quantity of money. In contrast to Wicksell and Ohlin, Taussig and Keynes argued that, under convertible currency, transfers of demand required movements of gold. The most important issue, however, was whether adjustment could come about through changes in income or changes in relative price levels. The difference was not, as Taussig and Keynes argued, that the demand-transfer theorists skipped the period of adjustment, dealing instead with equilibria, but was rather that a different mechanism was being proposed. Having said this, however, it is important not to exaggerate the contributions of the advocates of the demand transfer mechanism. Despite the similarity of their ideas to those later advocated by Keynes, the crucial concept of the multiplier was missing. This makes pre-1930 discussions of the transfer mechanism very different from post-1936 discussions of the problem.

17.5 THE THEORY OF THE EXCHANGE RATE

Cassel's theory of purchasing power parity

The currency instability of the first world war and after, when many countries suffered from periods of severe inflation and rapidly depreciating currencies, brought into prominence the question of exchange rates, something which had not been relevant when convertibility into gold at a fixed exchange rate could be assumed. The most widely discussed theory of international exchange rates was that of Cassel, the creator of the term "purchasing power parity". The earliest version of the theory was the simplest.

If we consider two countries, A and B, with independent paper currencies, the money of A can have value in B only on the ground that it represents buying power, or more generally paying power in A. The price in B of the money of A will, therefore, be broadly proportional to the buying power of the money of A and will
consequently stay in inverse proportion to the general prices in A. Furthermore, the
price in B will, of course, tend to be proportional to the general level of prices in B.
Thus the rate of exchange between the two countries will be determined by the
quotient between the general levels of prices in the two countries.56
In other words, people value foreign currency only for the goods it will buy
in the country concerned. If foreign prices double, foreign currency will be
worth half as much. Similarly, if domestic prices were to double and
foreign prices were to remain unchanged, the value of domestic currency
would be halved and people would pay twice as much domestic currency
for a unit of foreign currency. If both domestic and foreign prices doubled
the exchange rate would be unchanged.

This theory of the exchange rate was completed with a simple quantity
theory of money:

Now, according to the quantitative theory of money the general level of prices
varies, other things being equal, in direct proportion to the quantity of the
circulating medium in a country. If this be true, the rate of exchange between two
countries must vary as the quotient between the quantities of their representative
circulating media.57

To confirm this theory Cassel looked at data for Britain and Sweden.
Cassel’s approach was determined by the availability of data. Using an
index of British prices and measures of currency circulation in Sweden58 he
calculated the inflation which had taken place since 1910–1913.59 From this
he could calculate what should have happened to the exchange rate since
1910–1913 if the purchasing power parity theory were true. He found that,
for the 12 months in 1915, the period he investigated, there was very little
divergence between the actual exchange rate and its theoretical rate given by
purchasing power parity.

Criticism and development of the theory

The theory, as first stated by Cassel, was very straightforward, but it soon
became clear that it had to be modified. One of the first modifications was
that restrictions on trade might cause the exchange rate to diverge from
purchasing power parity, provided they affected a country’s exports and
imports unequally. Restrictions on imports, for example, might cause a
country’s currency to appreciate.60 Exchange rates might also depart from
purchasing power parity as a result of speculative capital movements, these
perhaps caused by expectations of inflation or particularly severe balance of
payments deficits.61 The outcome of this type of modification to Cassel’s
theory was that purchasing power parity came to be seen as a theory of the,
longer term, equilibrium exchange rate. This tendency is most clearly stated
by the most prominent British exponent of purchasing power parity
theory, Keynes (1924):

the essence of the purchasing power parity theory, considered as an explanation of
the exchanges, is to be found, I think, in its regarding internal purchasing power as
being in the long run a more trustworthy indicator of a currency’s value than market
rates of exchange, because internal purchasing power quickly reflects the monetary policy of the country, which is the final determinant.\textsuperscript{69}

Though the theory thus became very different from Cassel’s original version, a theory of month-by-month exchange rates, it retained the notion that causation ran from domestic monetary policy to changes in the exchange rate. This was criticized by several economists who argued that causation ran the other way round. In the US, for example, it was argued that from 1862 to 1879, a period when the dollar was inconvertible (the Greenbacks), commodity prices had followed changes in the exchange rate. It was variations in the probability of paper currency being redeemed in gold that caused, firstly, variations in the exchange rate, and secondly, changes in commodity prices.\textsuperscript{63} Amongst American economists it was Fisher, the foremost exponent of the quantity theory, who was the most important supporter of purchasing power parity.\textsuperscript{64}

Even if causation did run from money to the exchange rate, there were still important problems with purchasing power parity. Pigou (1922) raised several important technical problems with the theory. Particularly important is the fact that not all goods enter into international trade. For non-traded goods there is no reason why there should be any relation between two countries’ prices. To show the importance of this for purchasing power parity we need to consider the distinction between absolute and relative purchasing power parity (Pigou called them “positive” and “comparative” respectively). Absolute purchasing power parity states that the exchange rate is the ratio of the price levels in two countries: if a given bundle of goods costs $6 in the US, and £2 in the UK, then purchasing power parity implies $3=£1. Against this version of purchasing power parity, the existence of non-traded goods is decisive, for it means there is no reason why purchasing power parity should hold. Relative purchasing power parity, however, states that the change in the exchange rate since some base period is given by the difference between two countries’ inflation rates. This version of the theory can be defended in the presence of non-traded goods, provided that, within each country, the ratio of the prices of traded and non-traded goods has not changed.

This question of non-traded goods raises the question of what price index should be used in calculations of purchasing power parity. If relative prices of traded and non-traded goods are changing then a general index of prices cannot be used. On the other hand, if the price of traded goods alone is used, the theory becomes, as Keynes later pointed out, almost a truism: it follows from the fact that, allowing for transport costs, there can be only one price in the world market for a commodity.\textsuperscript{65} In addition, when the price index used is the price index of only those goods entering into world trade, it becomes much harder to see causation as running from prices to exchange rates, rather than vice versa.

Still further complications arise from the fact that divergences between purchasing power parity and exchange rates can occur through shifts in demand, or through changes in productivity. Any demand shift, for example, which causes a change in the terms of trade should produce a
discrepancy between purchasing power parity and the exchange rate. While some economists (e.g., Keynes) supported an appropriately qualified version of purchasing power parity, others rejected the theory altogether. Thus Taussig (1927) argued that "there is no normal or settled rate of exchange based on purchasing power parity." 68

Some of the problems faced by economists writing on exchange rates in the inter-war period stemmed from the paucity of the available data. Of particular interest here is an attempt by Brisman (1933) to introduce a cost parity into the discussion. He argued that equilibrium consists in balance between the rate of exchange on the one hand and the international competitive power of the paper currency country on the other. The latter is determined by the effective costs of production in the paper currency country compared with the same costs of production in the gold standard countries. 69

This was the idea that underlies indices of competitiveness, such as relative unit labour costs. However, whilst such indices of international competitiveness, often referred to as "real" exchange rates, are routinely calculated today, Brisman was forced to accept that such "effective costs of production cannot be determined statistically". His conclusion was the pessimistic one that, "we must consequently give up any idea of a numerical expression for the state of equilibrium". 70

17.6 EMPIRE AND COLONIAL DEVELOPMENT

Hobson

Amongst non-Marxist economists there was, in the late nineteenth and early twentieth centuries, only one who developed a new approach to the empire: Hobson. 71 The theory for which Hobson is best known is his theory of "financial imperialism", expounded in Imperialism: a Study (1902) and a series of writings in the years up to 1914. 72 In its simplest version his theory started from the unequal distribution of income in capitalist countries, which led to chronic over-saving. Hobson took up the idea, going back to Smith and Wakefield, that imperial expansion could be used to provide an outlet for investment and for exports of commodities. Protection was an aspect of this process, for protection could raise profits, accentuating the maldistribution of income and hence the surplus of capital seeking investment outlets. Thus despite his earlier advocacy of protection and imperial expansion as a means of countering under-consumption at home, Hobson turned against protection as being one facet of imperialism.

In arguing the case for free trade Hobson was following the radical tradition of which Cobden had been the outstanding exponent in an earlier era. 73 His reasons for supporting free trade, however, changed substantially. In 1902 Hobson was adopting the view that prosperity depended primarily on the home market. Given radical domestic reforms, which would reduce inequality and correct the tendency to under-consumption, foreign trade would become comparatively unimportant:
[if the industrial revolution had taken place in an England founded upon equal access by all classes to land, education and legislation, specialization in manufactures would not have gone so far ... for trade would have been less important, though more steady; the state of life for all portions of the population would have been high and the present rate of national consumption would have given full, consistent, remunerative employment to a far larger quantity of public and private capital than is now employed.]

Given equality in the distribution of income, demand would be sufficient to ensure full employment. In later writing, on the other hand, Hobson moved towards a more Cobdenite position, stressing the contribution of free trade, and the resulting interdependence of nations, to world peace.

An important aspect of Hobson’s thought is his view of the effects of imperialism on the colonial territories. Hobson’s subtletest analysis of the prospects for colonial territories came in 1902 where he argued that capital export was capable of transforming the world economy: countries such as China could develop to such an extent as to become a serious competitive threat to Europe and America. This outcome, however, was not inevitable, or even likely, for all regions, for two reasons. Firstly, Hobson saw an enormous difference between countries such as China and India, with a long history of civilization, where the local social organization might prove sufficient to cope with development; and other areas, such as Africa, where orderly development and the avoidance of exploitation might require external supervision. Secondly, and more importantly, a natural development of Asian and African countries based on local needs was contingent on reforms within western societies. In the absence of radical, egalitarian reforms in western countries, imperialism would lead both to a vast growth in the wealth and power of the western financial class at the expense of the Chinese and western working classes, and to unsuitable, exploitative forms of development being imposed on Asia and Africa.

Hobson’s fear at this time was a de-industrialization of the West, with manufacturing becoming concentrated exclusively in the East due to lower labour costs. Western prosperity would then be confined to finance and services. Later, however, he moved towards a less radical, and more orthodox, view of the prospects for the international division of labour.

**Colonial development**

In the inter-war period several specialists on colonial problems wrote about issues that would now be included under the heading of development economics, an important example of such work being Lilian Knowles’ *The Economic Development of the British Overseas Empire* (1924–1936). This inter-war literature shows how differently the subject was then conceived. Firstly, the term development was usually used to denote the development of natural resources, whether by government or private enterprise, rather than in the Marxist sense of the progressive evolution of an economic system. Secondly, this development of a region’s resources was seen as something separate from increasing the welfare of the region’s inhabitants.
This distinction was embodied in the doctrine of the "dual mandate", which had parallels in other colonial powers, whereby the British colonial government was thought to have two responsibilities: development and the welfare of colonial peoples.  

Though on a limited scale, and comparatively neglected until the growth of interest in development economics after 1940, some important work was done on analysing the problems facing colonial territories. Two contributions stand out, those of Boeke, writing about Dutch colonies, and Furnivall, writing about the British. Both stressed the different social structure of many colonies compared with that of European countries. Boeke developed a theory of a dual society, one comprising an imported, usually capitalist, social system, together with an indigenous, often pre-capitalist, society. Different economic principles were needed to analyse the behaviour of the two sectors of the economy, western economic principles being applicable to the capitalist part, the indigenous population being slow to accept western values and to respond to economic incentives. Though he differed from Boeke in not accepting that their native populations did not respond to economic incentives, Furnivall similarly analysed colonial territories as having social structures different from those of western economies.

In the words of one commentator,

there existed by the 1930s a large literature of colonial economics, in scholarly books and articles, as well as in mountains of official reports, on which the profession at large could have drawn had the subject interested them.