Comparative Advantage and Trade in Services

Brian Hindley and Alasdair Smith

Does the theory of comparative advantage, developed over two centuries to clarify thought about trade in goods, apply to trade in services? An economist who has not thought about the issue might stare blankly if confronted with the question. His problem would be to understand why comparative-advantage theory might not apply to services. There is a well-defined (which is not to say, perfect) conceptual framework for the study of international trade. No obvious characteristic of that framework limits its applicability to tangible goods rather than intangible services.

Certainly it is from others than professional economists that the question seems to come, but it comes sufficiently persistently to deserve a more considered response than the one given above. Ronald Shelp, of the American International Group in New York, in a chapter entitled ‘Economic Theory: a History of Neglect’, remarks:

‘Whether the theory of comparative advantage is applicable to international service trade is a striking illustration of the failure of economic theorists to come to grips with services. Where in the economic literature on comparative advantage can a discussion of the service sector be found? Can even one example using a service product to illustrate comparative advantage be recalled?’

The underlying premise in that kind of comment is that services are different from goods — which may, indeed, be so. But a bunch of flowers, a ton of coal and a jet airliner are very different things as well. It may be true that no economist has discussed international trade in brussels sprouts or used that vegetable to illustrate comparative advantage, but that surely does not raise any substantial question as to whether the conceptual apparatus of the theory of comparative advantage is applicable to brussels sprouts.

BRIAN HINDLEY is Counsellor for Studies at the Trade Policy Research Centre, London, and a Senior Lecturer in Economics at the London School of Economics and Political Science, University of London, and ALASDAIR SMITH is Professor of Economics at the University of Sussex, United Kingdom.
That services are different from goods — whatever that means in a particular context — does not in itself provide any basis for a supposition that the theory of comparative advantage (which is also referred to as the theory of comparative cost) does not apply to services. For that, it is necessary to point to differences which make the logic of the theory inapplicable to services, a much more stringent requirement than mere ‘differences’.

WHAT IS THE THEORY OF COMPARATIVE ADVANTAGE?

The first step towards a full answer to the question of whether the theory of comparative advantage applies to trade in services is to clarify what economists mean by the term ‘comparative-cost theory’. There is rather widespread misunderstanding of what comparative-cost theory implies. In particular, it is often taken to imply support for — indeed, to be almost synonymous with — free trade (or laissez-faire policies in general). This is not the case.

The theory of comparative cost comes in two parts. The first is a positive or descriptive theory; the second, a normative or prescriptive one. It is of central importance to keep the distinction between the two clear.

Positive theory attempts to explain why production of particular goods is cheaper (relative to other goods) in one location than in another and, therefore, why some classes of goods are exported from, and others imported to, a particular location.

Normative theory asks whether the pattern of production and specialisation which results from international cost differences is economically efficient and socially desirable and investigates what are the optimal government policies towards international trade.

In some cases, the answer to the central question of the positive theory of comparative cost is straightforward. There is no particular difficulty in explaining why Sweden, for example, imports oranges and bananas. In other cases, including most manufactured goods and probably most services, fully satisfactory explanations of the comparative advantage attaching to particular locations are more difficult to obtain.

The model most widely used by trade theorists to ‘explain’ trade flows is the Heckscher-Ohlin-Samuelson model. In the textbook version of this model the direction of trade is determined by capital and labour endowments at different locations. Economists concerned with testing theories of trade flows, however, have found it necessary not only to extend the Heckscher-Ohlin-Samuelson model to take account of additional factors of production, such as skilled labour, but also to develop new theories which turn on such variables as technological differences, economies of scale and market imperfection.
This broad and expanding menu of hypotheses might reasonably be taken to suggest that no one current theory is capable of explaining satisfactorily flows of trade in goods; it might even be taken to suggest the possibility that there will never be one satisfactory theory into which all others may be subsumed. Theories of international trade in goods face major problems in explaining the available data on goods flows. Even so, data on service flows, theories which explain them and the testing of such theories are all in a very much more problematic state than their counterparts in goods trade.

These problems will be discussed in detail below. It is worth noting at this point, however, a common error. The fact that it may be difficult to disentangle the determinants of trade — that is to say, the fact that it may be difficult to develop a convincing description of the sources of comparative advantage — does not in any sense invalidate the prescriptions of the theory of comparative cost.

On one level, the position that ignorance of the determinants of comparative advantage gives an intellectual justification for ignoring the normative component of the theory of comparative cost is vacuous. We do not have to know why the butcher, the baker and the candlestick-maker are better at their craft than us to know that it is so and to draw appropriate policy conclusions.

It is more generous to the argument, however, and more instructive, to view it as focussing on the intersection of two questions:

(a) What determines comparative advantage?

(b) Are there policies available to governments which will enable them to change the comparative advantage of their countries in an advantageous way?

Evidently the answer to question 'b' might be conditional on the exact answer to 'a'. In fact, however, almost all the affirmative answers to question 'b' appear to be one variant or another of the infant-industry argument (or, as it appears in its current North American and West European guise, the argument that senile industries can be rejuvenated by kind treatment); and that argument, discussed below, does not depend on the precise specification of the source of comparative advantage. Unless some different answer to question 'b' appears which is conditional on 'a', it follows that difficulties in empirical testing of theories do not provide intellectual justification for ignoring the normative component of the theory of comparative cost.

To state the point alternatively, suppose that it was possible to identify those service industries in which a country was likely, for whatever reason, to develop a comparative advantage. What would be the policy implications of such an observation? Consider, as an example, the textbook Heckscher-Ohlin-Samuelson theory.

It is often supposed that the textbook explanation of trade patterns in which countries well endowed with capital relative to labour are predicted to specialise in capital-intensive goods, while labour-abundant ones specialise in labour-
intensive goods, implies that developing countries should, in some sense, concentrate their development efforts on labour-intensive activities. Such an interpretation is mistaken (i) because it confuses 'is' with 'ought', (ii) because it reverses the true order of causation and (iii) because it misunderstands what type of information is required for economic decision taking. Specifically:

(a) If it is observed that the market tends to favour the development of labour-intensive activities, the relevant policy question is whether such favouring will be of a greater or lesser degree than is socially desirable. There is no general presumption that market choices will be biased in one way or the other.

(b) To interpret the Heckscher-Ohlin-Samuelson theory as a policy prescription is to misunderstand the direction of causation in the sense that the theory is demonstrating a consequence of the optimal choice of technique rather than providing a defining characteristic of that technique.

(c) To say that a low-wage country will, and should, adopt techniques and activities which are more labour intensive than those in use in high-wage countries is not to give a well-defined prescription to the economic decision taker who is faced with much more specific questions.

To put this last point in another way, usable economic prescriptions are either general policy prescriptions, such as 'the government should give special encouragement to sectors which generate positive externalities, for example by subsidising the training of new workers'; or they are very detailed and specific prescriptions, such as 'a steel plant of the most modern specification and of minimum efficient scale should be constructed on a coastal site'. Any conclusions derived from the positive theory of comparative advantage are too specific to be the first type of prescription and too general to be the second.

The foregoing observations apply to the services sector as well as to manufacturing and they apply to all explanations of comparative advantage. Thus, even if it were possible to establish that a particular type of country had characteristics which would make it an efficient producer of, say, shipping services, that is not in itself an argument for special encouragement or discouragement of this type of activity.

The only policy implication of the positive theory, then, is a modest one. Public-sector planners concerned with the appropriate size and shape of publicly-provided infrastructure will want to forecast future developments in the private sector. Understanding the sources of comparative advantage will be of some help in this respect.

In addition to being clear about the distinction between the normative and the positive theory of comparative cost, it is important to understand the logical structure of the normative theory itself. The starting point of that theory is David Ricardo's classic discussion of the gains from trade.
If two parties enter a voluntary transaction, there is a strong presumption that each regards himself as gaining thereby. A question relevant to the issue of whether individuals should be allowed to proceed freely with voluntary transactions, however, is whether others will be harmed by that activity. For the important class of transactions involving the purchase of goods from abroad, Ricardo demonstrated that other members of the country cannot in aggregate be worse off (and will in general be better off) if such transactions are freely allowed than if they are totally prohibited. The underlying force of the observation is very great; too great to be lost from sight. It stands to this day and nothing in the logical structure of its proof excludes international transactions involving services from its scope.

Nevertheless, the Ricardian proposition that free trade is better than no trade has only limited applicability to the trade policies of most countries, which typically seek to control and regulate trade flows rather than to eliminate them. Control and regulation are more defensible, in terms of economic efficiency, than prohibition. Thus the normative theory of comparative advantage goes on to investigate whether such interventions can be justified.

It is essential to be clear about whether one is discussing the policy objective of improving the welfare of a single country or the objective of improving the welfare of all countries considered together. Global welfare cannot be maximised when countries maintain border controls such as tariffs. From a cosmopolitan point of view, therefore, tariffs and other trade-restrictive measures cannot be good instruments of policy. From a national point of view, however, trade restrictions may be desirable instruments of policy. When a country can raise the price of a good which it exports, or reduce the price of a good which it imports, by restricting the quantities which it trades, maximisation of national welfare requires that it should exploit its monopoly or monopsony power in that way. This, however, will entail the cost from a cosmopolitan point of view of reducing global welfare. Essentially such a country can shift the distribution of global income in its favour by means of tariffs and emerge a winner from a negative-sum game: it may have a positive optimal tariff.

Even from a national point of view, this kind of argument does not justify wholesale protectionism. As a practical matter, the level of trade restrictions which is justifiable on the basis of this optimal-tariff argument, for most countries and most goods, is likely to be zero or almost zero. Only the very largest countries such as the United States are likely to have much impact on the import prices they face and, while it is easier to find examples of countries which can influence their export prices (Saudi Arabia for oil and Brazil for coffee), even that list quickly becomes difficult to fill.

A further set of issues is whether trade restrictions are useful tools from the standpoint of domestic policy objectives. One notable conclusion of the theory of optimal international economic policy is that, even from a national point of view,
the efficient attainment of policy goals very rarely requires the imposition of trade restrictions (the major exception being the optimal-tariff argument cited above), although it may well require the use of non-border measures such as taxes on, or subsidies to, output. Hence the difficulties in levying border taxes on services, frequently cited in official documents, do not imply any difficulty in applying efficient economic policies to the services sector.

DO THE PRESCRIPTIONS OF COMPARATIVE-COST THEORY APPLY TO SERVICES?

A first answer to this question, therefore, must be 'yes'. Economists embarking on proofs of the proposition that the world as a whole gains from free trade do not normally specify the characteristics of the 'goods' \((x_1, x_2, x_3 \ldots)\) which enter their analysis; and even the typical use of the word 'goods' is a matter of tradition, not deliberately designed to exclude services. Had Ricardo in his classic example specified wine and insurance policies instead of wine and cloth, his demonstration of the gains from trade would have still succeeded, it being dependent only on one country being able to produce insurance policies at a lower cost relative to wine than the other country. Nothing in the logical structure of his proof \(ipso facto\) excludes international transactions involving services from its scope.

All of this notwithstanding, certain classes of both goods and services have characteristics which raise doubts about the applicability to them of the Ricardian proposition or of other propositions from the body of comparative-cost theory.

First, many service industries are subject to fiduciary regulation and, in many others, sellers are required to possess appropriate licences and/or qualifications. These ubiquitous facts could be interpreted as a challenge to the major premise of the Ricardian argument; as deriving from a belief that, without such restrictions, one party to a voluntary transaction may be wrong to regard himself as having gained from it. This issue is considered in the next sub-section.

Secondly, the Ricardian argument is about trade. But in some industries, and notably in some service industries, foreign markets are most efficiently served by a permanent presence in the market — by the establishment of a local branch or subsidiary. In a review of eighteen service industries, the Department of Commerce in the United States identified eight industries in which investment is the dominant mode for international transactions (accounting, advertising, automobile and truck leasing, banking, employment agencies, equipment leasing, hotels and motels and legal services), eight industries in which both trade and investment flows are important (communications, computer services, construction and engineering, educational services, franchising, health services, insurance and motion pictures) and only two industries in which trade flows dominate (air and maritime transport). This raises the question of how foreign direct invest-
ment as a substitute for trade, or as a necessary condition for trade, should enter the analysis.

From the observation that trade and foreign direct investment may be close substitutes in the case of some services (such as insurance) and that trade and mobility of labour may be close substitutes in other cases (such as management services), some people have drawn the conclusion that there are problems in the application of standard trade theory, as developed for trade in goods, to the services sector. It is not at all clear why this should be so. Certainly, there is a particular problem for the positive theory, in that it may be hard to predict whether a comparative advantage will manifest itself as a trade flow, an investment flow or a labour flow. But from the viewpoint of the normative theory there is less of a problem. A country gains from importing services or allowing immigration of labour or receiving foreign direct investment if the terms on which these transactions take place are more favourable than the terms available on domestic transactions. The basic reasoning is the same in each case. To the extent that the three modes of commerce are close substitutes, the welfare effects of the three should also be almost the same. Nevertheless, the view that there is a problem here is sufficiently widespread to deserve more detailed attention and we consider this point later in the section.

Turning now to the other strands of the normative theory identified in the previous section, it can similarly be considered whether services deserve exceptional treatment.

Is the optimal-tariff argument especially applicable to the services sector? On the contrary, it seems unlikely that there are many countries (or even many groupings of countries acting in concert) which have available to them in the services sector trade-restrictive policies that would have an appreciable effect in reducing the cost to the country of services purchased from abroad (unless that cost had previous been raised by poor policy, which is certainly possible).

Indeed, it was argued above that, where countries have world market power to exploit, it is likely to be in their export markets rather than their import markets. Such power is better exploited by taxes on exports than by taxes on imports. And, in so far as trade policies are designed to exploit monopoly power in international markets, the difficulty of taxing imports at the border does not make a sound economic case for imposing alternative forms of restrictions on imports of services.

This is a suitable point at which to deal with the possibility that the foreign country has monopoly power which it is exploiting. This is quite different from the optimum-tariff argument, for that argument is concerned with how the home country should exercise its monopoly power, if it has any. Let us suppose, therefore, that we are concerned with policy choice in a country which does not have market power itself, but is faced by a monopolistic supplier which is offering goods or services at a price significantly above the marginal cost of production. In such a situation, there is an incentive for the country to promote (by protection or
direct subsidy) the development of domestic suppliers, even if they are less efficient than the foreign monopolist, for their very existence will (i) reduce the foreign supplier’s monopoly power, (ii) lower the price faced by the country and (iii) transfer some of the monopoly profits from the foreign supplier to the home country.

Of course, the application of this argument is strictly limited. It cannot be in a country’s interest to produce at a cost greater than the marginal import cost at which supplies are obtainable from the foreign monopolist (although that marginal import cost will exceed the price charged by the monopolist which, in turn, will exceed the monopolist’s cost of production). It has to be said, however, that the scenario in which a foreign supplier has significant monopoly power seems, at least in the area of services, fairly implausible. The mark-up over marginal cost must surely give an incentive to potential competitors to enter the market and to drive down the price. It may be that there are barriers to entry in particular cases, so that one foreign supplier is in a privileged and protected position, perhaps as a consequence of past colonial links. Then, there is a simple and powerful policy response, namely to remove the barriers to entry by other foreign suppliers and by domestic firms. In general, the adoption of policies which facilitate entry, whether by domestic or foreign competitors, into allegedly monopolistic markets seems likely to be a socially less costly means of curbing monopoly power than the promotion of inefficient domestic firms.

The discussion now turns to the theory of optimal policy intervention in the presence of distortions. There are two major cases, or groups of cases, in which policy interventions affecting trade flows, but by means other than tariffs, can be defended on economic grounds.

The first group of arguments was alluded to earlier, namely the presence of distortions in domestic factor markets. Factor markets may, indeed, be badly distorted in many countries, especially developing countries, with the result that the services sector is larger or smaller than it would be if resources were efficiently allocated. But there is no a priori means of determining whether, in practice, the effect is likely to be that the services sector is too small or too large. Moreover, application of this set of ideas to the services sector seems to raise no special conceptual difficulties. The analysis appears to apply whether the industry is producing a ‘service’ or a ‘good’. But one member of this group of arguments is the infant-industry argument; and that argument is sufficiently important for special attention to be devoted to considering its specific relevance to the services sector (see below). Balance-of-payments arguments for protecting domestic service industries might also be included in this group. One of the authors has discussed that issue elsewhere in the context of insurance. There is little to add to that discussion for services in general.

The second group of arguments for intervention also raises issues that are not, in principle, specific to service industries, although they may, in practice, have a
more direct relevance to certain ones than to goods industries. These are arguments for intervention based on the existence of externalities in production or consumption. Appropriate policy in either case will typically entail subsidies to activities generating positive externalities and taxes on those activities generating negative externalities. Again, as with factor-market distortions, the analytical framework is as relevant to services as to goods. If a side-effect of a service activity is to 'pollute' the environment with, say, pornographic displays then it is desirable to discourage the activity, just as it is desirable to reduce the output of goods whose production pollutes the air with smoke.

There is a case for a tax on imports only when it is imports as such which generate the negative external effects. Particular service industries (cinema and video film, popular music and advertising) provide examples of such putative negative external effects attached to imports. Such imports are often said to have deleterious effects on local cultures (in both developed and developing countries). If that is so, then there may be an economic efficiency case for border measures or restrictions on use.

This kind of externality argument raises profound issues which are not appropriately discussed in this article. For example, observers may disagree on the sign of the external effect. The necessarily large subjective element entailed in conjectures about consumption externalities in general means that it is very difficult to separate alleged externalities from bigotry (others ought to have what I think they ought to like), simple conservatism or the interests of those engaged in the domestic industry.

There are therefore three problems in the application of the normative theory of comparative cost to service industries that merit further discussion: (i) the issues involved in regulation and licensing, (ii) issues arising from foreign investment and (iii) the infant-industry issue. They will be discussed in turn.

**Regulation and Licensing**

It is very striking that at the domestic level, in almost all economies, the services sector is the target of government intervention and regulation of a nature and degree which is different from the intervention to which non-service activities are subject. The motivation and nature of this regulation deserves close scrutiny, first in case it reveals a genuine need for interventions specifically targeted at services or at particular services, then in order to investigate whether such interventions should affect international transactions to a greater or lesser extent than domestic transactions and, finally, to investigate the implications for international trade of the regulation which, whether for good or bad reasons, exists and is likely to continue to do so.

The fact that the services sector is subject to more detailed government intervention than other sectors is most easily seen by consulting any account of the
Overwhelmingly, it is services which are subject to regulation. It may take the following forms: (i) control of the rates charged by utilities, (ii) control of entry into and of rates charged in various modes of transport, (iii) control by licensing and/or numerical restriction of entry into many services such as the law, accountancy, medicine, hairdressing and taxi driving, (iv) government ownership or control of telecommunications, broadcasting, cable television and other media and (v) detailed supervision of the structure and practices of banks, insurance companies, security traders and other financial companies.

It would be an exaggeration to suggest that there is an entirely uniform pattern to these examples of regulation. Nevertheless, two common and connected themes do emerge. The first is the danger of 'destructive competition' and the second is the need to protect the interests of ill-informed buyers.

The argument that competition will be destructive is very commonly offered in transport, being based on the alleged tendency for industries in which there are large fixed costs and fluctuating demand to be subject to competition of an intensity that leads to frequent bankruptcy and to constant changes in the services offered to consumers. Thus such cartels as the International Air Transport Association (IATA) and shipping conferences flourish under the sponsorship, and with the protection, of government. A related argument is that there will be 'cream-skimming' — a situation in which some firms are willing to supply only the most lucrative markets, so that competition leads to a deterioration or loss of service in the less lucrative markets.

It is probably true to say that economists, by and large, find these arguments less persuasive than members of the industry said to be subject to these problems. For example, arguments that competition will be destructive typically require a continuing stream of entrants into an industry, even though their presence will lead to negative profits in equilibrium. Few economists would find this absolutely inconceivable. Rather more might find it difficult to accept that the conjunction of circumstances is probable or likely to be of practical importance. Similarly, the 'cream-skimming' argument requires that protected firms should be willing to provide service to a market in which they will incur losses. An alternative and more economically plausible hypothesis is that the 'non-cream' markets are in fact profitable.

There is no particular virtue in the intuitions of economists on empirical matters. Fortunately, however, evidence from the United States of the effects of de-regulation is now available. De-regulation of domestic passenger air transport has brought about a significant reduction in fares and a fair degree of both exit from and entry into the industry, but there has been very little evidence of competition of a degree that would harm consumer interests in the long run or of loss of service to marginal markets. Similarly, the relaxation of regulation of the New York Stock Exchange has brought about significant gains to the consumers of
its services and no evidence of the destructive competition which the stock exchange itself had predicted on the basis of the (scarcely credible) argument that its members had a high ratio of fixed to variable costs. (As any economist would have predicted, the most striking single effect of de-regulation was on the price of a ‘seat’ on the stock exchange, that price reflecting the value of the anticipated monopoly rents available from the limitation on entry and competition.) These, admittedly limited, examples give some grounds for adopting a sceptical approach to arguments of destructive competition, especially when they are offered by those with a clear self-interest in the restriction of competition.

The second major argument for regulation rests on the imperfect information of buyers, a problem which seems to be greater when it is an intangible service rather than a tangible good that is being purchased. But imperfect information on the part of buyers does not ipso facto make a case for regulation of suppliers. In principle, it would be possible to ensure that the relevant information was available so that buyers could make their own choice between alternative suppliers on the basis of it. This raises the problem, however, that it might be expensive for buyers to interpret such information (the balance sheets of insurance companies, for example). Moreover, when the basic information required is the same for all buyers, the duplication involved in each buyer seeking and interpreting the same information for himself is wasteful. There is a case for just one agency or person to acquire and process the information and to disseminate it to all other potential buyers. This does not have to be a government agency, although ‘free-rider’ problems emerge when it is not. Nor, if it is a government agency, is it necessary on this ground that it should be equipped with powers to compel suppliers rather than powers to inform buyers.

But a case for regulation starts to take shape when the information requirements of buyers are uniform, when all are likely to act in the same way on the basis of that information and when it is expensive to convey the information to them. Suppose that no fully-informed buyer would buy insurance, deposit money or fly in the aircraft of a company with characteristics below a certain level. If it is expensive to inform all potential buyers of the fact that a company’s characteristics have fallen below the required level then there is a possible case for ruling that any company taking deposits, selling insurance or providing air passenger transport should display the appropriate characteristics. Companies which are unwilling or unable to attain the required level should be refused the opportunity of offering the service.

It is worth emphasising that this case rests (i) on the costs to buyers of acquiring information, (ii) on homogeneity of the information requirements of buyers and homogeneity of reactions to particular pieces of information and (iii) on the high costs to an information-gathering and information-interpreting agency of disseminating information. These conditions are quite restrictive.
The argument is not exclusive to services. Many traded goods are subject to health, safety and technical standards, presumably on identical grounds. Indeed, this fact constitutes an increasingly important problem in trade policy (especially, perhaps, within the European Community where, as with trade in services, the possibility of affecting imports by tariffs is limited). In trade in goods, as in trade in services, the basic objectives of regulation are widely seen as legitimate. But there is an important difference between goods and services. A regulatory agency can forbid a supplier of goods to sell ‘sub-standard’ items while permitting it to continue to sell its other lines, but in many services the distinction between the standard of the product and the acceptability of the supplier does not exist. An unsatisfactory bank is one which seems likely to default on all its obligations, a doctor of dubious competence cannot be required to supply only competent medical care and so on. Thus when the case for regulation is accepted it becomes a case for regulating entry into the industry. The next step is to recognise that often the natural people to police standards of entry are the existing suppliers of the product, for who can judge the competence of a prospective lawyer, accountant or hairdresser better than a professional qualified in the field? Once the industry is given a key role in setting standards of entry, or even advising on the appropriate standards of entry, the regulatory agency is in imminent danger of ‘capture’ by the industry, of being more concerned with protecting the interests of suppliers than those of consumers.

Then the problem of equity arises if there is ever a proposal to de-regulate or to relax standards of entry. Those who entered the industry under regulated conditions will normally have paid some form of entry fee which reflects the value of the super-normal profits associated with the restriction. A proposal which has the effect of cutting the resale value of a stock-exchange seat or a taxi licence will be seen as inequitable by those who thought that they had purchased a permanent right to operate in a protected market. The implication is that market regulation will have a ‘ratchet’ effect, with de-regulation being rarer than increases in regulation.

At the very least, all of this must lead one to suspect that in a regulated industry, even if there exists a good case for some regulation, there will be a systematic tendency for regulation to be taken too far.

What is the relevance of all this to the application of the theory of comparative cost to the services sector? Given the existence of a case for government intervention, the central question is whether international transactions should be treated differently from domestic transactions. On the face of it, there is no such case. If consumers need protection from over-optimistic, stupid or fraudulent suppliers, they need that protection independently of the nationality of the suppliers. The existence of a case for regulation in no sense invalidates prescriptions deriving from the theory of comparative advantage. To the extent that consumers benefit from competition, more competition seems better than less.
competition and foreign countries may be an important source of potential and actual competition. The established reputations of foreign suppliers may be an important source of assurance to customers. This is as true of services as of goods and such considerations argue for regulation of service industries in ways that are neutral as between domestic and foreign suppliers and that are specifically designed to avoid exclusion of foreign competition.

This, it must be recognised, is a counsel of perfection. In practice, even a well-intentioned government will find it difficult to regulate service industries in ways that do not accidentally discriminate against foreign competitors. For example, a common requirement in the banking and insurance industries is that a firm should have an adequate capital base relative to its level of operation. To require that a foreign subsidiary show evidence of such assets in the country of operation may be to under-estimate the possibilities of risk spreading and risk sharing among the different parts of a multinational enterprise and to impose costly restrictions on the investment policy of the firm. On the other hand, to allow the assets of the parent firm or other foreign-held assets to be used to meet solvency requirements exposes one to the danger that if the same assets are used to guarantee the solvency of several independent operations, they may be inadequate cover against the independent risks to which the multinational enterprise as a whole is subject. No doubt there is much to be gained by the adoption of methods of protecting consumers which do not discriminate against foreign competitors, but it seems impossible to avoid all conflict between the objectives of free competition and the objectives of consumer protection.

In addition, there is the problem that governments normally do not want to be even-handed between domestic and foreign firms and, in their attempts to protect domestic firms against foreign competition, will welcome the opportunity to design domestic policies whose ostensible purpose is to protect consumers, but which really serve to exclude, or hamper, foreign competition.

The problem of recognising misuse of regulatory powers may be exaggerated. It should not be difficult to test whether a measure whose supposed intention is to protect consumer interests does in fact fulfil such an objective.

*Foreign Investment in Service Industries*

The point has already been briefly made that, in principle, foreign investment is susceptible to the same type of analysis as international trade. An international investment will be made when both investor and recipient see in it better opportunities than they see elsewhere and this transaction, which is apparently to the private mutual benefit of the parties involved, will fail to be socially beneficial under precisely the conditions discussed earlier in the context of trade. This will be as true of investment in the services sector as of investment in the goods sector.
The fact that in the services sector investment flows may be of greater relative importance than trade flows is then of no particular significance.

There is, however, the following issue which has not yet been considered in this article. If some non-optimal policies are being followed by a government, might it not be the case that other policies should be adjusted to take account of the distortions created by the first set of policies? This issue is of some practical importance in relation to the effects of trade policies on investment flows. For example, if a multinational enterprise is induced to invest in a host country only by the need to get round the host’s restrictions on imports of goods, will such a ‘tariff-hopping’ investment necessarily be beneficial to the host? In fact, it might not be so, precisely because of the existence of the trade restriction. An import restriction benefits the producers within a country of import-competing goods at the expense of consumers. The earnings of producers are raised above the social productivity of the inputs of producers because they include a component which is simply a transfer from consumers. If foreign firms invest in an economy because the returns to such investment are raised by the presence of the import restriction, then the cost to the host country of the investment may well exceed the benefit, for the returns to the investor will exceed the true social productivity of the investment. Another way to view the potential loss in this case is as a reduction in tariff revenue as imports (subject to tariffs) are replaced by the output associated with the foreign investment.

A further possibility is that inward investment, although not harmful in itself, may cause a deterioration in the terms of trade — by expanding production of exports and reducing the prices received by existing exporters.

It seems implausible that either of these effects would be adverse in the case of inward investment in the services sector. In a country importing services an adverse terms-of-trade effect would require the investment to have the effect of increasing the volume of exports through the industrial relocation of any domestic factors displaced from the services sector. Such an effect, if it occurs, is likely to be small and in any event is unlikely to have an effect on the terms of trade which is sufficient to offset the positive effects of the investment. In a country which is an exporter of services, it seems equally implausible that the effects would be significant. As has already been argued, it is unlikely that many countries can influence their terms of trade in services.

Nor does it seem likely that losses from tariff-hopping investment will occur in the services sector. This is because imports of services are typically not subject to tariffs. There may be a variety of other barriers to trade which give rise to behaviour analogous to tariff-hopping investment and such barriers may generate ‘rents’ which correspond to the tariff revenue. For example, where there are quotas rather than tariffs, the owners of import licences earn rents from their ability to buy cheaply abroad and sell expensively at home. In so far as the direct result of foreign investment in the services sector is a reduction in imports of the
service that were previously not taxed at the border, there is less likely to be an adverse social effect, for the rents of importers are not likely to be as socially valuable as tax revenue received by the government. To this extent, inward investment in service industries is more likely to give rise to gains to the host country than inward investment in tariff-protected goods industries (which, in practice, seems itself unlikely to give rise to losses, given taxation of profits). This conclusion applies a fortiori to investment in those industries (which may only occur in the services sector) in which foreign suppliers can serve the market only through foreign direct investment.

Finally, it is worth noting a range of general issues which arise concerning foreign direct investment and which are extensively discussed in the vast literature on the multinational enterprise. There is the possibility that foreign investment in the services sector generates positive externalities in the host country. In so far as many service industries rely on human skills and 'know-how' for their comparative advantage and in so far as many service industries can be entered on a relatively small scale (compared with manufacturing industry), contact with multinational enterprises may provide the quickest route for local residents to acquire the relevant knowledge and skills and to create a locally-based industry which does not have to rely on protection of one form or another for its existence.

On the other hand, there are the concerns which many have about foreign direct investments: transfer of technology, interference in host-country politics, transfer pricing and so on. Perhaps only in the case of communications and computer services are there issues of particular relevance to the services sector, but these general issues are beyond the scope of the article.

By contrast to the widespread feeling that foreign investment raises particular problems in the services sector, our general conclusion is that, from an economic point of view, inward investment in service industries seems more likely to give rise to economic gains to the host country than inward investment in goods industries (which, in practice, seems unlikely to give rise to losses, given sensible policy in the host country).

It has also been noted that labour migration may be a substitute for trade in services. This, however, is a form of international transaction which raises major issues which again go far beyond the scope of the article.

**Infant-industry Case in Services**

The essentials of the infant-industry case — and its difficulties — are the same for goods and services. It is not necessary, therefore, to differentiate between goods and services in setting out the issues.

The infant-industry argument starts from the postulate that a country has an inherent comparative advantage in some activity. Nevertheless, the output of that
activity is imported. The inherent comparative advantage does not display itself in current production because the local industry cannot come into existence, or expand consistently with its inherent comparative advantage, because of competition from established firms abroad.

Hence, it is said, there is a case for protection. Were the ‘infant’ allowed a competition-free space in which to grow, there would be a process of learning by doing and the comparative advantage would be revealed. At the end of the process the local industry would be viable without protection and this, it is said, would give rise to a net gain to the country as a whole.

Appropriate protection will expand the scale of the domestic activity and, therefore, will lead to more local residents possessing the requisite skills of the activity than would otherwise be the case. Were the argument for possession of the activity on national soil based on some externality — the needs of national defence, say — this would be sufficient. Local residents would then be bearing a cost for some specified purpose. But the attraction of the infant-industry case is exactly that it maintains that, in the aggregate, local residents will not bear a cost for supporting the activity. There will be social returns to the initial costs of protection which justify those costs in pure economic terms.

Two statements are necessary for the infant-industry argument to arrive at its conclusion that protection is justified in economic terms:

(a) Encouragement of the industry by protection is socially worthwhile. The expected social gains from protection outweigh the expected social losses when both are appropriately discounted.

(b) Without protection it is not privately worthwhile for producers to enter the industry. The expected private gains from entering the industry are outweighed by the expected private losses when both are appropriately discounted.

The problem for proponents of this argument is to explain how these two states of affairs can co-exist. The social gains from establishing the activity all accrue, in the first instance, to local producers. In the absence of protection the social losses entailed in the establishment of the industry would also accrue to them as private losses (and, depending on the form of protection, they might be smaller than the social losses from protection). If it is socially worthwhile to establish the industry by protection, therefore, it seems that it must also be privately worthwhile. The question which advocates of the infant-industry case must answer is why private producers do not act on this incentive: why protection is necessary to establish the industry.

Several answers might be given to this question. They include, for example, a social rate of discount that is lower than the private rate, different social and private attitudes towards risk and the blanket case of uninformed potential producers and well-informed members of governments. Perhaps the most important answer focusses on ‘first-mover disbenefits’ within the industry where the
returns to the investments of those first entering the industry — for example, their investments in research and development — do not accrue to those who made the investment, but are spread over later entrants also, who, for example, acquire at low cost the knowledge which the early entrants acquired at a high cost. The optimal policy response to such problems will vary with the imperfection alleged; but the key point here is that none of the justifications for giving special assistance to infant industries is a justification for protection from foreign competition. There is always a policy response that is economically more efficient than a trade restriction.

The first point to be borne in mind when applying the infant-industry argument to services is this: the difficulties of applying a tariff to some service imports does not preclude efficient policy responses to infant-industry cases. Nor will it be an efficient response to any of the above conditions to prohibit or restrict foreign investment in the industry (which, it might be noted, will provide a possible solution to problems of first-mover disbenefits, since such disbenefits might then accrue to foreign investors to the benefit of local or potential local producers).

Applying the infant-industry argument to service industries essentially calls for answers to two questions. The first is whether the conditions required for the argument to be valid are likely to apply to service industries. The second, if they do, is what policies are appropriate?

The answer to the question of whether the circumstances of the infant-industry case apply to service industries is obviously empirical, not appropriately answered in a priori terms. Nevertheless, one might conjecture, first, that since entry into many service industries can be made on a relatively small scale, attitudes towards risk are likely to be a less important determinant of entry and establishment than in manufacturing industry. Second, it is difficult to think of reasons why government officials might have better sources of information on the potential of enterprises in service industries than potential entrants into those industries. Third, it is difficult to think of first-mover disbenefits that might affect service industries. Each of these points provides some ground for scepticism that the conditions of the infant-industry case will be met in service industries.

If this is incorrect, and those conditions do exist, however, neither differences between social and private rates of discount nor attitudes towards risk provide a good ground for policies specific to service industries. Both call for policies that correct the underlying problem in general — for goods and services. This might entail, for example, general policies towards capital markets or in the provision of capital for new firms. In the case of first-mover disbenefits, there will typically be some defect in the economic structure and an efficient policy will be to correct that defect so that those who invest in research or in training labour are appropriately rewarded. Only adherence to the position that government officials know best might suggest actions specific to the services sector (in the event that what they know is that entry into their domestic services sector will yield profits for
entrants). Even then, the appropriate policy is a subsidy to output of the domestic services sector. It does not entail discrimination against foreign firms supplying services, whether by trade or investment.

**Conclusion on the Normative Theory**

This section has addressed the question of the applicability of the *normative* theory of comparative cost to the services sector. It is concluded that none of the potential difficulties in applying the normative theory of comparative cost to trade and investment in service industries appears to yield any *a priori* reason to suppose that the theory does not apply. Or, to put it more positively, the theory of comparative cost does provide a useful framework in which to analyse the particular issues which arise in the services sector. Attention now turns, therefore, to the positive issue of what actually determines comparative advantage in service industries.

**WHAT DETERMINES COMPARATIVE ADVANTAGE IN SERVICE INDUSTRIES?**

Evidently this is a question which ultimately requires answers based on empirical analysis. Conjecture may generate hypotheses, but hypotheses need empirical support in order to be translated into potentially useful statements about reality. In the area of trade and investment in services, however, the data necessary to test more than the most sweeping hypotheses are usually absent. Nevertheless, it seems possible to make some observations about the likely pattern of comparative advantage between developed and developing countries.

In the present context, the basic stylised fact of trade and investment in services is that services, and service-related investment, tend to flow from developed to developing countries. There are exceptions to this statement. Were the global civil aviation industry to be liberalised, for example, it is very likely that some airlines based in developing countries would expand at the expense of airlines based in developed countries. Nevertheless, it is in general true that developing countries import, and developed countries export, services.

Service industries engaging in international transactions tend to be organised around information and its exploitation. This strongly suggests that countries with a relatively large skilled labour force will have a comparative advantage in the production of services. In addition, the production of some services (especially transport) requires substantial capital. Few internationally-traded services require large amounts of labour *per se*. Where they do (shipping, construction and engineering), the companies involved are often able to find means of combining their physical assets and skills with developing-country labour. With this partial
exception, all of these considerations suggest that developed countries have a comparative advantage, and developing countries have a disadvantage, in the production of services.

In principle, these hypotheses are easy to test. In practice, though, there is a major problem with the availability of data and only one brave attempt has been made to break through that barrier, by André Sapir and Ernst Lutz in a study for the World Bank. The study uses only a small range of industries (freight transport, passenger transport and insurance) and is typically for only a small sample of countries. It sometimes uses constructed variables that are at best an uncertain approximation of what they are attempting to proxy. Finally, it deals with trade flows only, so that any interrelationship between trade and investment flows is ignored. All these deficiencies (which are recognised and highlighted by the authors) are due to lack of data.

In spite of that problem, however, the results of the econometric analysis are in broad and sometimes strong conformity with the conjectures set out above. Professor Sapir and Dr Lutz conclude that ‘the main factors shaping comparative advantage in services trade are the availability of physical and human capital’. Moreover, ‘developing economies that are successful in accumulating capital have good prospects for exporting services. Nevertheless, for most developing countries, emphasizing the export of services does not appear to be a realistic prospect.’

As against this, however, there are particular areas within the services sector where the development of micro-electronic technology may hold significant prospects for developing countries. Micro-electronics is advanced technology, but the ‘technological gap’ between developed and developing countries may be of less importance here than in other areas. The rate of diffusion of technological knowledge between firms in micro-electronics is quite unprecedented which means that one should expect a rapid rate of international diffusion also. The number of people in an electronically-based enterprise who are required to have advanced expertise will in some cases be a very small proportion of the labour force; and the levels of skill required from most of the labour force may be quite modest.

A further aspect of the micro-electronic revolution is that it greatly facilitates communication between different locations, to the extent that it is now possible for a worker in one country with access to a computer terminal to receive information, instructions and ‘raw materials’ electronically from another country, to perform the tasks assigned to him and then to deliver the ‘product’ back to the distant employer or customer.

A concrete example is as follows. In recent years the typesetting stage of book production has been increasingly performed in developing countries in the Middle East and Asia. The source of this apparent comparative advantage is a simple one. Typesetting is labour intensive and wages of print workers in the developed
countries are particularly high relative to skilled wages in developing countries. The comparative advantage of developing countries in this area can be expected to grow as electronic transmission of data reduces transport costs and delays and as more stages of the printing process are incorporated electronically into the typesetting stage. (This example assumes that typesetting itself will remain a significant part of the printing process and is not supplanted by direct input from the writer of the material. The general point, however, will apply to any process requiring keyboard input of a routinised kind.)

CONCLUSIONS

One of the most important features of services is their role as an intermediate good. Services purchased by other producers will typically be complementary to their production and trade. To raise the price of such services, or to reduce their quality, by inappropriate policy is therefore to tax production and trade in service-using industries as well as to tax final consumers of services. Such taxation will often occur, however, without any corresponding revenue to the national treasury. The ‘tax revenue’ will pass directly to local producers of protected services, absorbed either in inefficient operation or in augmented profits of local producers.

Such taxation of consumers and users of services requires strong justification. In this article we have offered some reasons for being sceptical of the existence of such justification. In so far as local producers of services need protection or subsidisation to survive (which, of course, is unlikely to be the case for all of them), in so far as there is no basis in infant-industry-type externalities to expect that protection will permit a sufficient rate of increase in their acquisition of comparative advantage to justify the costs of production and in so far as there is not a positive external effect deriving from the industry (as, surely, there is not for most service industries) then the protection of local producers is simply a burden on the economy — developed or developing — that employs it. Similarly, domestic regulation of service industries needs justification and the relevant question is whether the correct balance is struck between the costs and benefits of regulation to users of services. It has been argued that, although a good case potentially exists for some regulation, there may be a systematic tendency for regulation to take forms which are sub-optimal and to go too far.

The size of the services sector suggests the possibility that the burdens implied by incorrect policy are large. The nature of service industries and of the data on their operations that are currently available — and that are likely to be available in the near future — makes any attempt at quantification a far from easy task.

This article has argued, however, that from a conceptual point of view there is no difficulty about applying the standard toolkit of the international economist to the
problems of trade and investment in services. Services are different from goods in ways that are significant and that deserve careful attention, but the powerful logic of the theory of comparative advantage transcends these differences.

1. This article is based on an extract from a longer paper prepared for the Secretariat of the United Nations Conference on Trade and Development (UNCTAD) on the role of services in the development process. The UNCTAD Secretariat has given permission to publish the extract as a contribution to the current debate on the services issue. An earlier version of the article was discussed at an international conference on Restrictions on Transactions in the International Market for Services convened by Wilton Park and the Trade Policy Research Centre at Wiston House, near Steyning, West Sussex, in the United Kingdom, on 30 May to 2 June 1984. We are grateful to participants in the conference, and particularly to Professor Jagdish Bhagwati, who was the discussant of the paper, for their valuable comments.


7. See, for example, Leonard W. Weiss and Michael W. Klass, Case Studies in Regulation: Revolution and Reform (Boston: Little Brown, 1981).


12. Ibid., p. 31.


14. For further discussion and related points, see Jagdish N. Bhagwati, 'Splintering and Disembodiment of Services and Developing Nations', The World Economy, June 1984.

'The orthodox economists have been much preoccupied with elegant elaborations of minor problems'

— Joan Robinson, An Essay on Marxian Economics (1947)
On the Question of an MFA
Mark IV

In mid-1985 governments have to start considering whether to renew the Arrangement Regarding International Trade in Textiles, better known as the Multi-fibre Arrangement (MFA). Debate on the question has been stimulated by the recent publication of the GATT Secretariat's study on Textiles and Clothing in the World Economy. Two complementary contributions to the debate, covering issues largely outside the terms of reference of the GATT study, have recently been published by the Trade Policy Research Centre.


That trade restrictions under the MFA are costly to the exporting countries is well understood. But what of the countries that impose the restrictions? The ostensible purpose of the restrictions is to 'buy time' for adjustment, but in practice it has been to secure employment. The evidence surveyed in this study shows that the costs of protection to the restricting countries are much greater than is generally realised and far exceed the value of the small number of jobs actually preserved.

Clothing-industry Adjustment in Developed Countries, by José de la Torre, Thames Essay No. 38 (1984), 286 pp., £10.00 and $15.00.

It is widely believed that, under the threat of low-cost competition from developing countries, the clothing industries of developed countries would disappear unless they are afforded rigorous protection. The essay analyses private and public responses to change in the clothing industries of the United States, Japan and the European Community and finds that successful companies in developed countries have already demonstrated a route to survival by serving an increasingly international and fashion-oriented segment of the market. Meanwhile, governments have focussed their efforts on defensive policies of protection. Government policies need instead to support the efforts of those companies that are moving in line with global market trends. A key element would be a carefully planned programme of trade liberalisation embracing both developed and developing countries.