

INTERNATIONAL TRADE

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International trade is not intrinsically different from transactions in which commodities do not cross national boundaries. Nevertheless, the study of international trade has traditionally constituted a separate branch of microeconomics. It may be distinguished from other branches by its focus on situations where some but not all goods and factors are mobile between countries; and from international macroeconomics by its focus on real rather than nominal variables (trade flows and relative prices rather than exchange rates and money supplies), and by a tendency to examine medium-run issues using equilibrium analysis rather than short-run positions of disequilibrium.

One of the first and most durable contributions to the analysis of international trade is the principle of *comparative advantage* developed by David Ricardo in 1817. This is the antecedent of both the normative and positive strands of international trade theory. At a normative level, it postulates that an absolutely inefficient country will nevertheless gain from trade; and at a positive level, it predicts the direction of trade: each country will tend to export those goods which it produces relatively cheaply in the absence of trade. As an explanation of trade patterns, the principle has met with some success. However, in its classical form it is open to two objections: it assumes unrealistically that unit production costs are independent of scale or factor proportions; and it fails to explain why they differ between countries in the first place.

A theory which overcomes these deficiencies was developed in the first third of the twentieth century by the Swedish economists Eli Heckscher and Bertil Ohlin, who stressed international differences in *factor endowments* as the basis for comparative advantage and trade. Thus a country which is relatively capital-abundant will tend to export goods which are produced by relatively capital-intensive techniques. Largely through the influence of the American economist Paul Samuelson, a simplified version of this theory, assuming only two goods and two factors in each country, has come to dominate the textbooks. In this form it

is a useful teaching device for introducing some basic concepts of general equilibrium theory but, not surprisingly, it is overwhelmingly rejected by the data. The most notable example of this is the so-called *Leontief Paradox*, an early application by Wassily Leontief of his technique of input-output analysis, which found that the presumably capital-abundant United States exported labour-intensive commodities, thus contradicting the theory. Nevertheless, for most economists probably the preferred explanation of trade patterns between countries at different levels of economic development is an eclectic theory of comparative advantage along Heckscher-Ohlin lines, allowing for many factors of production, some of them (such as natural resources) specific to individual sectors.

However, this theory fails to account adequately for certain features of contemporary international trade, especially between advanced economies with similar technology and factor endowments. Such trade is frequently *intra-industry*, involving both exports and imports of differentiated products within a single industry. Recent theories explain such trade in terms of imperfectly competitive firms producing under conditions of increasing returns. Attention has also focused on the increased international mobility of factors, in part through the medium of *multinational corporations*. The level of foreign direct investment, both in the form of "greenfield" investment (building new plants) and cross-border mergers and acquisitions, has increased even more than that of trade in recent decades. The increased flows of goods, factors and ideas associated with these trends constrain domestic policy-makers, so posing a wide range of problems often grouped together under the catch-all term "globalisation".

As well as attempting to explain the pattern of trade, positive trade theory also makes predictions about many aspects of open economies. Best known of these is the implication of the Heckscher-Ohlin model known as the *factor price equalization theorem*. This predicts that, under certain circumstances, free trade will equalise the prices of internationally

immobile factors; more generally, it suggests that as more and more markets are opened to international trade, the remaining domestic markets become more exposed to foreign shocks and less to domestic ones. The theory also makes predictions concerning such issues as the effects of tariffs and international transfers on foreign and domestic prices, the effects of trade policy on domestic income distribution and the consequences of structural change.

Turning to normative trade theory, it has traditionally focused on the merits of free trade relative to autarky, stemming from a production gain (as the home economy specialises more according to its comparative advantage) and a consumption gain (as consumers are no longer constrained to consume only domestically produced goods). Similar arguments favour partially restricted trade relative to autarky, although the benefits of discriminatory trade liberalization (such as the formation of a customs union by a sub-group of countries) are not as clearcut. Recent work on trade under imperfect competition has pointed towards additional sources of gain: trade may lead home firms to produce at lower cost and, by exposing them to foreign competition, at higher efficiency levels; and consumers may gain from increased diversity of choice.

Two exceptions to the case for free trade are normally admitted. The *optimal tariff argument* states that a country with sufficient market power can gain by behaving like a monopolist and restricting the supply of its exports. The *infant-industry argument* defends transitional protection to enable a new industry to benefit from learning and scale economies. (As with many arguments for trade restriction, the latter on closer examination is less an argument against free trade than against *laissez faire*.) Recent work on *strategic trade policy* has added to these arguments the possibility that a government's ability to precommit to tariffs or subsidies may allow it to give an advantage to home firms competing against foreign rivals in oligopolistic markets. Notwithstanding these arguments for restricting trade, and the

absence of conclusive empirical evidence in its favour, most economists subscribe to a pragmatic case for free trade, while recognising that the benefits of rapid integration into the world economy may well be offset by the costs in the short run.

The persistence of protectionist sentiment, despite these theoretical arguments, may be explained by the fact that gains from trade accruing to the economy as a whole are not inconsistent with losses to individual groups, especially owners of factors specific to import-competing sectors. The textbook Heckscher-Ohlin model illustrates this principle with the *Stolper-Samuelson Theorem*, which predicts that (for example) increased imports of unskilled-labour-intensive goods will lower the wages of unskilled relative to skilled workers. Empirical evidence suggests that technological change rather than trade is the main culprit for the increased return to skills in developed countries. Nevertheless, organised workers and shareholders in import-competing industries, and other special interest groups, have incentives to lobby for protection, which may explain why trade remains considerably more restricted internationally than domestically.

Other special models have been developed to deal with important features of contemporary international trade. Thus, the growth of trade in intermediate goods (as opposed to goods for final consumption) has inspired the theory of *effective protection*, which builds on the insight that an industry benefits from tariffs on its outputs but is harmed by tariffs on its inputs. Changes in technology have made possible a process of vertical disintegration or *fragmentation* of production, as firms source their inputs from, or locate different parts of their production chain in, different countries. Falls in transport costs also appear to have encouraged *agglomeration* of economic activity, as firms locate near their competitors to benefit from lower input costs or improved access to consumers.

The enormous growth in world trade since the Second World War has been driven in

part by steady declines in trade barriers. Some of these have taken place as a result of the formation of customs unions or free-trade agreements, such as the European Union (formerly the EEC) and the North American Free-Trade Agreement. However, most trade liberalisation has resulted from multilateral negotiations under the auspices of the General Agreement on Tariffs and Trade (GATT), formally reconstituted in 1995 as the World Trade Organisation (WTO). Successive rounds of negotiations have had to contend with new forms of trade restrictions, as the decline in importance of tariffs (at least between developed countries) has focused attention on the widespread use of *non-tariff barriers* (such as quotas, health and safety regulations and government procurement policies) as methods of restricting trade.

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Further Reading

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