INTERNATIONAL ECONOMICS, FINANCE, AND TRADE

Pasquale M. Sgro
Professor of Economics, School of Economics, Deakin University, Melbourne, Australia

Keywords: Adam Smith, barter, balance of payments, Bretton Woods Agreement, capital account, capital investment, central bank, classical school, Common Market, comparative advantage, competition policies, consumer price indices, consumer surplus, corruption, customs union, countervailing duties (CVD), direct finance, division of labor, domestic regulation, economic integration Economic Union (EU), emerging capital markets, environment, European Monetary Union (EMU), exchange controls, Exports, finance, financial institutions, financial markets, free trade, Free Trade Areas, General Agreement on Tariffs and Trade (GATT), geography and trade, global capital markets, globalization, Gross Domestic Product (GDP), harmonization, Hechscher E., horizontal differentiation, Hume D. Imports, increasing returns to scale, indicators, interest rate, international economics, international finance, International Monetary Fund (IMF), intra-industry trade, investment, laissez-faire, Mercantilism, monetary policy, money and credit, money market, Mill J S, Most Favored Nations (MFN), multinational banking, Neo-Marxists, neo-classical economists, non-tariff barriers (NTB), Ohlin.B. OPEC, open-market operations, orthodox theory, perfect competition, Preferential Trading Agreement, price-specific flow mechanism, producer surplus, public goods, Ricardo D, risk aversion, securities, specialization, strategic trade policy, sustainable development, tariffs, technology, trade and growth, trade liberalization, transitional economies, Voluntary Export Restraint (VER), Welfare, World Trade Organization (WTO).

Contents

Summary

International economics involves the exchange of goods and services between countries as well as trade in financial assets. This exchange provides citizens with the opportunity

to consume goods and services from a variety of countries and enables world production to become more efficient in the sense that countries can concentrate their production on those goods that best suit their circumstances. As a consequence, total global output of goods and services increases, leading to potential increases in consumer welfare.

The worldwide growth in international trade in recent years has been substantial, so much so that the term globalization is appropriate. While the motives for engaging in international trade are clear, the factors determining the pattern of this trade are still debated. Differences in factor endowments, technology, political and social institutions, infrastructure and consumer tastes have at various times been offered as reasons why countries export certain goods and import others. Various theoretical models have also been developed to try and explain the pattern of world trade and governments have tried at various times to restrict this trade to protect special interest groups.

The interaction between international trade, growth and sustainable development is an important one. Historically the argument that freer international trade will lead to higher growth rates and sustainable development has been dominant. More recently, it has been argued that some government involvement is necessary to ensure that consumers are protected and that resources are preserved for future generations. The issues of tariff and non-tariff barriers to trade, strategic trade policy, and trade liberalization are discussed in this framework.

The provision of financial services can be traced back to the Phoenician Era in 1000 B.C. although the present day sophistication and development of modern multinational banking and financial institutions is a far cry from these early beginnings. The evolution of the international financial system has played an important role in facilitating the growth in trade, as has the growth of capital markets. This is especially the case today with the emerging economies in central and eastern Europe, along with some Asian and Latin American countries. This evolution includes a viable set of international trade agreements and/or laws to solve disputes when they occur and to reduce the level of corruption.

Achieving economic transformation of these emerging economies involves domestic policy reforms as well as a conducive international setting. The importance of international institutions in facilitating and encouraging trade and sustainable development through grants and foreign aid is clear. There is some debate about the costs of domestic policy reforms that are imposed on some of these economies by international institutions as a condition of receiving foreign aid or loans. The solution to the ongoing problems of income distribution and sustainable development are crucial for the future well-being of the planet and its inhabitants.

1. Introduction

The subject matter of international economics and finance includes all transactions that cross national boundaries, including trade in goods and services, capital and labor markets, and transactions in financial assets. International economics is an extension of domestic trade but with certain important differences due to the environment in which trade takes place. Unlike trade within countries, barriers between countries prevent the completely free movement of goods, persons and capital. These barriers may be political, social, or linguistic as well as economic. Barriers that are primarily economic include customs duties, direct trade restrictions, or exchange controls. In some cases, impediments to trade are more subtle and take the form of elaborate customs procedures, packaging requirements, health regulations, and mixing regulations that require the use of a given minimum quantity of a domestically produced raw material in conjunction with an imported product.

The free flow of international trade may also conflict with the internal domestic policy objectives of the trading partners. For example, each country has its own specific needs and domestic regulations on taxes, investments, competition, wages, and prices, which will significantly affect trade and investment. A good example is the conflicts that have arisen between the EU countries domestic policies and the maintenance of a strong Euro currency in the foreign exchange market. Cultural variables will also affect trading relations between countries. These cultural values can consist of a set of beliefs, values, and attitudes. For example, drinking alcohol at social or business occasions is outlawed in most Islamic countries but is acceptable in Western cultures. National currencies make it essential to have a foreign exchange market, and movement in such markets can be affected by speculators and arbitrageurs. This adds a further source of instability in international trade that is not present in domestic commerce.

The importance of international economics in the world economy can be demonstrated in a number of ways. First, international trade enables all of us to consume goods and services from a variety of countries. These goods vary from Japanese and Italian cars to French cheese or fashion. It also enables resource-poor countries to access raw materials that are necessary for the development of their industries. Second, this trade and specialization increases world production efficiency in the sense that countries that are more efficient in the production of certain goods can concentrate on that production, export it, and import what they do not produce. In this way, total global output of the goods and services can increase, leading to increased welfare, employment opportunities, and the like.

Table 1 shows the world exports of merchandise and commercial services for the period 1996–8. Note that world exports fell in 1998 due to the Asian crisis and its repercussions. This feature is also captured in Table 2, where the rates of growth of both imports and exports are shown. What is clear, however, is that trade is still a very important component of total world output.

	Value ($ billions)			*Annual change (%)*		
	1996	*1997*	*1998*	*1996*	*1997*	*1998*
Merchandise	5 150	5 325	5 225	4.5	3.5	–2.0
Commercial services	1 275	1 320	1 290	6.7	3.5	–2.0

Table 1: shows the world exports of merchandise and commercial services for the period 1996–8.

Exports					*Imports*			
Average 1990–5	*1996*	*1997*	*1998*		*Average 1990–5*	*1996*	*1997*	*1998*
6.0	5.5	10.5	3.5	World	6.5	6.0	9.5	4.0
7.0	6.0	11.0	3.0	North America[a]	7.0	5.5	13.0	10.5
8.0	11.0	11.0	6.5	Latin America	12.0	8.5	22.0	9.5
5.5	5.5	9.5	4.5	Western Europe	4.5	5.5	7.5	7.5
5.5	5.5	9.5	5.0	European Union (15)	4.5	5.0	7.0	7.5
5.0	6.5	12.5	10.0	Transition economies	2.5	16.0	17.0	10.0
7.5	5.0	13.0	1.0	Asia	10.5	6.0	6.0	–8.5
1.5	1.0	12.0	–1.5	Japan	6.5	5.5	1.5	–5.5
11.5	7.5	11.5	2.0	Six East Asian traders[b]	12.0	4.5	6.5	–16.0

Table 2: Exports/imports.

The liberalization of trade flows, both in goods and services, plays an important role in advancing economic policy in the world economies. An important contribution to sustainable development and better environmental protection was made at the Uruguay Round negotiations. The member countries of the World Trade Organization (WTO) acknowledged that an open non-discriminatory trading system was a prerequisite for effective action to protect the environment and to generate sustainable development. This is based on the assumption that most countries, developing countries in particular, are dependent on trade as the main source of continued growth and prosperity.

2. Historical Development

Between the mid-sixteenth century and late seventeenth century, a powerful merchant class rose up in Europe as a result of the growth in international trade. This merchant class was primarily concerned with the relationship between a country's wealth, identified by its stock of precious metals, and its balance of trade. The doctrine known as Mercantilism that evolved at this time represented one of the earliest justifications for international trade. Its basic idea was that wealth was necessary for national power. This wealth was achieved by an interventionist philosophy that advocated government regulation to achieve a surplus on the balance of trade in order to accumulate precious metals. Hence merchants saw no virtue in a large volume of trade per se but recommended policies to maximize exports and minimize imports. In this way countries were able to amass holdings of gold and silver. To achieve this objective, tariffs and other import restrictions were enforced and exports were subsidized.

Mercantilism was a highly nationalistic policy and ran into intense criticism in the eighteenth and nineteenth centuries from the new *laissez faire* (classical) school of economics. At the time, however, the policy had some elements of rationality in the following sense. As a way of raising money to support armies and provide internal stability, taxing the foreign sector was more attractive to the rulers than taxing the landed gentry and peasantry. Second, restrictions on imports of machinery and raw materials could be thought of as a form of infant industry development policy.

The *laissez faire* or classical school pointed out two major weaknesses in the mercantilist arguments, and their criticisms influenced public policy in the nineteenth century. The Scottish philosopher, economist, essayist, and historian David Hume (1711–1776) pointed out one fallacy. As he explained, when a country increases its exports and accumulates more gold and silver coins, the money supply in the economy increases. He essentially used a simple quantity theory of money to argue that this increase in the money supply led to inflation or price increases in the domestic economy (under a fixed exchange rate). This increase in domestic prices made exports more expensive and hence they fell. At the same time, this increase in domestic prices made imports cheaper and they rose. With exports falling and imports rising, the country's money supply (precious metals) falls, so that a policy of maintaining an export surplus in the long run would be self-defeating. This process was called the "price-specific flow mechanism."

The second weakness was pointed out by Adam Smith in his 1776 *Wealth of Nations*. He observed that a country's wealth lies not in its stock of precious metals but in the quantity and variety of goods and services, domestic and foreign, that its citizens are able to afford. Furthermore, this "wealth" is increased by an inflow of goods and services, not by an inflow of precious metals.

These two arguments – that an export surplus cannot be maintained indefinitely and that consumers gain from trade – remain central to any modern day discussion of free trade versus protectionism. Doubts about the wisdom of the commercial policy advocated by the mercantilists were reinforced by David Ricardo (1772–1823) and John Stuart Mill (1800–1873).

David Ricardo was the pioneer of the concept of comparative advantage. He was the first to demonstrate formally that, in a two-good, two-country world, even if one country is absolutely more efficient in producing both goods than another country, trade will still benefit both if one specializes in that good in which its relative efficiency is greater, while the other produces that product in which its relative inefficiency is less. A specific example that illustrates this basic theory of comparative advantage is discussed elsewhere (see also "Comparative advantage and trade policy").

John Stuart Mill's contribution was to refine, clarify and extend the Ricardo analysis to demonstrate that free trade was superior to mercantilism from the point of view of the consumer. These arguments had a great deal of influence in Britain, where free trade was adopted in the mid-nineteenth century. Thus, from the earliest days of Hume, Smith, Ricardo, and Mill up to the present, international economics has always been preoccupied with public policy.

The theory of comparative advantage initially introduced by Ricardo has been used as a backstop to more recent developments in international trade. The work of Ricardo and Mill was an attempt to explain the determinants of international trade and specialization via technological differences between countries. This work was extended by E. Heckscher (1919) and B. Ohlin (1933), who argued that the determinants of international trade depended on differences in factor endowments between different countries. Extensions to their theory added consumer taste differences as a determinant of trade.

More recently, the new theories of international trade have taken the standard model of Heckscher and Ohlin (HO) and dropped the assumption of perfect competition and product homogeneity, and have analyzed the determinants and effects of international trade in the context of imperfect competition and/or product differentiation (Grossman, 1992; Krugman, 1979). Under this heading of new theories comes strategic trade policy, where there is interaction between the firms in international trade so that the actions of one firm may have significant effects on the action of another. This development marries industrial organization theory, game theory and the traditional trade theory of HO (Shaked and Sutton, 1984; Puga and Venables, 1997).

The fundamental assumptions that applied to what one can call the orthodox theory (Ricardo and HO) were, first, that there is perfect competition and, second, the commodities that are internationally traded are homogeneous and identical. That is, the homogeneous commodity X in country A is identical to the homogeneous commodity X in country B. The new trade theory developments drop one or both of these assumptions and emphasize trade via intra-industry trade and increasing returns to scale.

	Markets		
Products	*Perfect competition*	*Monopolistic competition*	*Oligopoly*
Homogeneous	Orthodox theory	–	Brander (1981)
Vertically differentiated	Neo Heckscher-Ohlin theories (Falvey 1981)	–	Shaked and Sutton (1984)
Horizontally differentiated	–	Demand for variety (Krugman, 1979); Demand for characteristics (Lancaster, 1980)	Eaton and Kierzkowsky (1984)

Table 3 Orthodox theory and the new theories of International trade.

Vertical differentiation refers to products that differ only in quality, for example, suits made out of different grades of wool. Horizontal differentiation refers to products of the same quality but different in their (real or presumed) characteristics, for example suits of the same quality, but of a different color or style. Thus this new trade theory has added a whole range of different reasons and motives for trade (see also “Comparative advantage and trade policy”).

Given these new developments in factors determining trade, the implications for economic policy become more complicated. Since there may be some interaction between firms involved in international trade – and since the market structure is either monopolistic, competitive, or oligopolistic – strategic trade policies now become relevant. In orthodox theory, there was no role for strategic trade policy. Unfortunately since the models and results in the new trade theories are contradictory, they do not provide any practical guide to government policy. Nevertheless, it is important to understand how these models work and their analytical implications, since it may be better to have a collection of examples that may capture what is actually going on in the world economy rather than restrict oneself to an integrated theory that is too restrictive. In models of strategic trade policy, interactions between governments (pursuing their own optimal policies) become relevant. The motivation for government intervention is to capture rents or external benefits at the expense of other countries, or alternatively, to prevent them from obtaining benefits at our expense. Thus the rationale for such policies relies on the fact that rents such as monopoly profits exist, or that these are external benefits of production. Government intervention could then be used to increase a country's share of these rents or benefits by, for example, promoting domestic development of those industries that create these substantial rents or benefits. The crucial condition here is that national welfare can increase, provided these industries are domestically owned. However, such industries are also the targets of multinational firms, international joint ventures, and partnerships. Nevertheless, it is undoubtedly true that the theoretical possibility of strategic trade policies has made it easier for interest groups and lobbyists to argue for government intervention in specific industries (see also "Comparative advantage and trade policy").

-
-
-

Bibliography

BRANDER, J. A. 1981. Intra-industry trade in identical commodities. *Journal of International Economics*, Vol. 11, pp. 1–14.

DEARDORFF, A. V.; STERN, R. M. 2000. *What the Public should know about Globalization and the World Trade Organization*. Mimeograph, May 13. [This paper provides a useful summary of the achievements of the various GATT rounds.]

DEPARTMENT OF THE ENVIRONMENT, TRANSPORT AND THE REGIONS. 2000. Indicators of Sustainable Development for the United Kingdom. http:www.environment.dets.gov.uk/epsim/indics/isoltheor.htm. [Provides a useful approach to determining key indicators to monitor sustainable development.]

EATON, J.; KIERZKOWSKY, H. 1984. *Oligopolistic Competition, Product Variety and International Trade.* In: H. KIERZKOWSKI, *Monopolistic Competition and International Trade*, 257pp, Oxford, Oxford University Press.

GANDOLFO, G. 1998. *International Trade Theory and Policy*. Berlin, Springer-Verlag. 544 pp. [This book provides a useful comparison between the orthodox and new trade theories.]

GROSSMAN, G. M. (ed.) 1992. *Imperfect Competition and International Trade*. Cambridge, Mass., MIT Press. 387 pp. [This book introduces imperfect competition into the traditional trade theory models.]

HECKSCHER, E. F. 1949. The effect of foreign trade on the distribution of income. [English translation of the original 1919 article in *Economisk Tidsskriff*, edited by H. S. ELLIS, and L. A. METZLER.], Philadelphia, Blakiston. 350 pp. [This paper was the pioneering paper (together with Ohlin, 1933) in introducing differences in factor endowments as a determinant of trade.]

INGHAM, B. 1995. *Economics and Development*. London, McGraw-Hill, 412 pp. [This book has a useful discussion on the various definitions of sustainable development.]

JACKSON, J. H.; DAVEY, W. J. 1993. *Legal Problems of International Economic Relations*. Minnesota: West Publishing Company. 542 pp. [A series of case studies on international trade law.]

JUTTNER, D. J. 1994. *Financial Markets, Interest Rates and Monetary Economics.* 3rd edn. Melbourne, Longman. 731 pp. [Provides a discussion of international finance and its historical evolution.]

KRUGMAN, P. R. 1979. Increasing returns, monopolistic competition, and international Trade. *Journal of International Economics*, No. 9, pp. 469–79. [This paper introduces increasing returns to scale and imperfect competition into traditional trade models.]

KRUGMAN, P. R. 1991. *Geography and Trade.* Cambridge, MIT Press. 160 pp. [This book argues that international trade is based on the location of production in space and emphasizes locational advantages as a reason for production specialization and trade.]

KRUGMAN, P. R.; OBSTFELD, M. 2000. *International Economics Theory and Policy.* 5th edn. Mass., Addison Wesley/Longman. 770 pp. [This book is a useful survey of international trade and finance theory and policy.]

LANCASTER, K. 1980. Intra-industry trade under perfect monopolistic competition. *Journal of International Economics*, No. 10, pp. 151–75. [One of the earliest papers that formally introduced imperfect competition into orthodox international trade theory.]

LEVY-LIVERMORE, A. 1998. *Handbook on the Globalization of the World Economy*. Cheltenham, UK, Edward Elgar. 748 pp. [This book provides some discussion on the development of transition of the former communist countries. It provides a realistic view of the costs involved in such transition in emerging markets.]

MISHKIN, F. S.; EAKINS, S. G. 1998. *Financial Markets and Institutions.* 2nd edn. Mass., Addison Wesley/Longman. 752 pp. [Provides a useful framework for analyzing the interaction of financial markets.]

OHLIN, B. 1933. *Interregional and International Trade.* Revised edition, 1967, Boston, Harvard University Press. 324 pp. [This work was pioneering (together with Heckscher, 1919) in introducing differences in factor endowments as a determinant of trade.]

PRYLES, M. ET AL. 1996. *International Trade Law*. Sydney: LBC Information Service. 1111 pp. [A series of case studies on international trade law.]

PUGA, D.; VENABLES, A. J. 1997. Preferential Trading Arrangements and Industrial Location. *Journal of International Economics*, No. 43, pp. 347–68. [This paper combines industrial organization, game theory and traditional international trade theory.]

SANDLER, T. 1997. *Global Challenges*. Cambridge: Cambridge University Press. 234 pp. [This book provides an economic analysis of the environmental problems facing the globe at the moment and suggests methods of analyzing them.]

SHAKED, A.; SUTTON, J. 1984. Natural Oligopolies and International Trade. In: H. KIERZKOWSKI, *Monopolistic Competition and International Trade*, pp. 34–50. Oxford, Oxford University Press. [This paper combines industrial organization, game theory and traditional international trade theory.]

SMITH, R. C.; WALTER, I. 1997. *Global Banking*, New York, Oxford University Press. 486 pp. [This book provides a good introduction to the historical development of global banking.]

Biographical Sketch

Pasquale M. Sgro is Professor of Economics at Deakin University, Melbourne, Australia. He has held numerous teaching and research positions at universities and research institutions in Australia and overseas. His research interests are in the areas of international trade and economic development where he has published a number of books and numerous journal articles. He is founding co-editor of the *Journal of International Trade and Economic Development*, published by Routledge (UK).