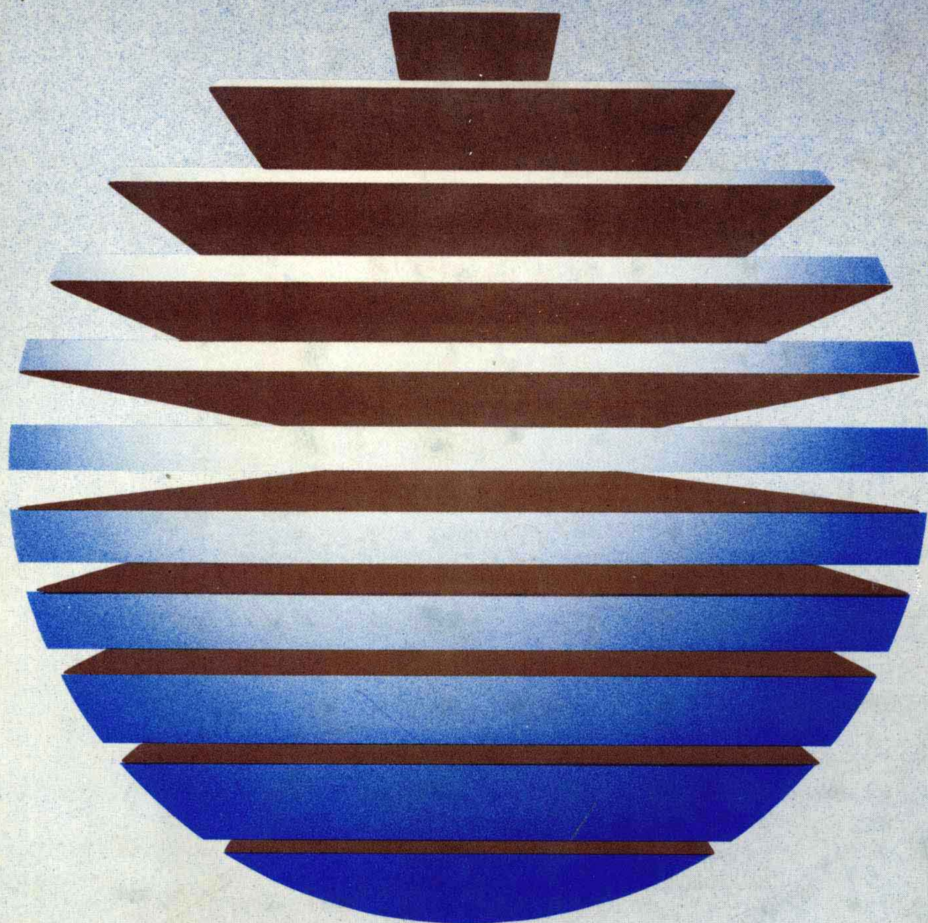
# PRINCIPLES OF INTERNATIONAL ECONOMICS



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# Principles of International Economics

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# Preface

The main objective of this book is to present those principles of international economics that are necessary for an understanding of the world economy. During the last few years, the international economy has undergone dramatic changes, such as the creation of OPEC and the substitution of flexible exchange rates for the adjustable peg. This book elucidates these changes and provides the necessary tools for the analysis of future changes.

This book is primarily addressed to undergraduate students with a major interest in international relations. However, it is flexible enough to serve the needs of readers with broader interests. Except for the *optional* appendix to Chapter 15, which uses some differential calculus, the exposition relies on simple geometry and high school algebra. The only prerequisites for this book are an introductory course in economics and the desire to learn. Readers with broader interests can safely omit all appendixes and optional sections (which are clearly indicated in the text).

The book is divided into four parts. Parts 1 (Chapters 2–7) and 2 (Chapters 8–11) deal with the microeconomic aspects of international economics (usually referred to as international trade theory and policy). Parts 3 (Chapters 12–17) and 4 (Chapters 18–22) deal with the macroeconomic aspects of international economics (known as international monetary theory and policy, or international finance).

For the benefit of the reader, each chapter concludes with a brief summary plus a short list of suggested additional readings.

Ideally, the book can serve the needs of a two-semester course, with Parts 1 and 2 covered in the first semester and Parts 3 and 4 covered in the second semester. However, the book is quite flexible and can be used in several different ways. For instance, a course in international finance could cover Parts 3 and 4 only (and perhaps Chapter 2, depending on the tastes of the instructor), without prior knowledge of Parts 1 and 2. Similarly, a one-semester course in international economics could cover Chapters 2–5, 8, 12, 13, 15–18, and 20–21, omitting all optional sections and appendixes.

I would like to thank Alan V. Deardorff, Heidemarie Sherman, Martin Bronfenbrenner, Loraine Donaldson, Klaus Friedrich, and Richard Anderson, who read the entire manuscript and offered numerous suggestions for improvement. I also wish to thank my colleague John Klein, who commented on several chapters of Parts 3 and 4; and Wilfred Ethier, Ian Giddy, and Ingo Walter, who reviewed the manuscript in its early stages. Needless to say, any remaining deficiencies are all mine.

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*Miltiades Chacholiades*

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Chapter One

# Introduction

This introductory chapter deals briefly with the distinction between microeconomics and macroeconomics, as well as between positive economics and welfare economics; the relationship between international economics and general economic theory; the role of trade in raising the standards of living of all countries of the world; the role of international monetary relations; and the overall organizational structure of the book.

## 1-1 MICROECONOMICS VERSUS MACROECONOMICS

Economics is a social science. Broadly speaking, it is concerned with the use of scarce resources (for example, different kinds of labor skills, land of various qualities, and the capital goods that modern technology produces) for the satisfaction of human wants.

Like most disciplines, economics is divided into several branches and subbranches. Its two major branches are *microeconomics* and *macroeconomics*. Microeconomics is concerned with the behavior of individuals and well-defined groups of individuals, or microunits, such as households, firms, and industries. Macroeconomics, on the other hand, deals with broad aggregates, such as national income, employment, consumption, and investment.

In a sense, the micro-macro distinction is artificial, because the actual decisions about production, consumption, investment, employment, and so on are made by the microunits of the economy. Therefore, the basic principles of economic theory are those which explain the behavior of the microunits. However, the distinction is justified by the basic differences in the objectives and methods of the two branches.

Microeconomics deals primarily with the analysis of price determination and the allocation of specific resources to particular uses. Macroeconomics, on the other hand, deals with the determination of the levels of national income, aggregate consumption, aggregate investment, and aggregate resource employment.

While microeconomics deals with individual prices (for example, the price of beef, the price of corn, and the price of wine) and their relationship to one another, macroeconomics deals with aggregate price indices (for example, the consumer price index and the wholesale price index). As a result, the relationship between individual units and aggregates is not clear in macroeconomics. Nevertheless, the simplifications introduced by aggregation are helpful.

Despite its great usefulness in explaining how the individual decision-making units of the economy fit together to form a coherent whole, microeconomics is severely limited by its enormous complexity and confusing detail when it comes to explaining aggregate behavior. This problem is very much like the problem experienced by a person driving from Los Angeles to New York using a road map that shows every little street along the way.

Macroeconomics offers a practical approach to aggregate economic behavior; it attempts to describe the behavior of the economic system in terms of a few simple aggregates. Surely it is much easier to study the overall performance of an economic system in such terms as national income, aggregate investment, and aggregate consumption than it is to study the behavior of each individual consumer and producer. To pursue our earlier analogy, the driver from Los Angeles to New York could greatly benefit from a road map that shows only the major highways, not a lot of unnecessary detail.

When properly understood, microeconomics and macroeconomics become complementary, rather than competitive, branches of economic theory. Thus, macroeconomics can enable policymakers to pursue appropriate strategies to ensure an economic environment that validates the verities of microeconomics. Similarly, microeconomics can often be a fruitful source of hypotheses that can be used, with suitable modifications, to explain aggregate behavior.

## 1-2 POSITIVE ECONOMICS VERSUS WELFARE ECONOMICS

Economics is also divided into *positive economics* and *welfare economics*. Positive economics is concerned with what actually *is*. Welfare economics, on the other hand, deals with what *ought to be*.

In particular, positive economics is concerned with the problem of how the economic system actually functions, why it produces the results it does, and how changes in the fundamental data of the economy (such as factor endowments, factor ownership, tastes, and technology) affect the solution of the economic problem. In principle, positive economics is independent of ethical judgments, and its propositions can be tested against the facts of the real world that they purport to explain.

In contrast, welfare economics deals with propositions that are themselves logical deductions from a set of assumptions which may or may not be ethical in nature. In contrast with those of positive economics, the propositions of welfare economics cannot be tested against the facts of the real world. The reason is simple: Welfare is not an observable quantity. Usually welfare propositions are tested indirectly by testing the assumptions from which they are derived —and this is an extremely delicate task.

The conclusions of welfare economics depend crucially on ethical judgments. Indeed, most disagreements among economists in the area of economic policy can be traced to some difference in ethical beliefs, not positive economics. Unfortunately, in public debate over economic policy, such differences in ethical beliefs are not always made explicit.

## 1-3 THE SCOPE OF INTERNATIONAL ECONOMICS

While general economic theory deals with the problems of a single closed economy, international economics deals with the problems of two or more open economies. In particular, international economics deals with the same problems as general economic theory, but it deals with them in their international setting. Thus, international economics studies how a number of distinct economies interact with each other in the process of allocating scarce resources to satisfy human wants. (This will be explained in Chapter 2.)

Clearly, international economics is more general than the economics of a closed economy, the latter being a special case of international economics (the number of trading countries reduced from many to one). Further, the study of general economic theory dealing with the problems of a closed economy is only a first (but necessary) step toward the study of the behavior of a real economy. Surely, there is no closed economy in the real world except the world economy.

Parallel to the dividing of economic theory into microeconomics and macroeconomics is the breaking down of international economics into two major branches: (1) international trade theory and policy and (2) international monetary theory and policy. The former is a long-run static-equilibrium theory of barter in which the short-run monetary-adjustment process is assumed completed, with money assuming its true, classical role as a veil. Its approach is basically microeconomic in nature. The latter is centered upon the monetary aspects of international monetary relations. Its approach is mainly macroeconomic in nature, and it deals particularly with the short-run problems of balance-of-payments disequilibrium and adjustment.

## 1-4 THE ROLE OF TRADE

The importance of trade springs from the extensive degree of specialization that exists in the twentieth-century societies. Indeed, even in the most primitive societies, people cooperate in the use of their scarce resources. The reason is obvious: Through such cooperation more goods are produced.

In other words, the high degree of specialization that exists in our society is due to the fact that specialization increases the standard of living by making more goods and services available for consumption.

Nevertheless, *specialization necessarily implies trade and cannot occur without it.* This follows from the fact that people usually want to have a "balanced diet." The specialized producer uses only a small part—maybe none—of the product for his or her personal consumption and exchanges the surplus for the goods and services of other specialized producers.

For instance, a shoemaker does not, and cannot, consume only shoes; he needs, in addition, many other goods and services, such as food, clothing, shelter, entertainment, and transportation. To obtain these other goods and services, the shoemaker exchanges his surplus production of shoes (which, for practical purposes, may be identified with his total output of shoes) for the specialized outputs of farmers, auto producers, physicians, tailors, builders, and the like. Such an exchange of goods and services among specialized producers is exactly what is meant by trade.

The exchange of goods and services among residents of the same country is usually called *domestic trade*. This book, however, is concerned with *international trade,* that is, the exchange of goods and services among residents of different countries.

For simplicity, in this book we shall speak of countries as economic units. It is important to remember, however, that it is the individuals who carry out the transactions.

Countries cannot live alone any more effectively than individuals can. Thus, each country tends to specialize in the production of those commodities it can produce more cheaply than other countries, and then exchanges its surplus for the surpluses of other countries. This process brings about an international division of labor that makes it possible for all nations to consume more of all goods and services.

Incidentally, the commodities a country imports can be divided into two categories: (1) those commodities which other countries produce more cheaply than the importing country and (2) those commodities which the importing country cannot produce at all. For instance, the United States may import textiles from Taiwan because Taiwan produces textiles more cheaply than the United States, not because the United States cannot produce textiles domestically. On the other hand, Japan may have to import oil from Saudi Arabia simply because Japan does not have any oil fields.

In the same way that the division of labor (specialization) within a single closed economy increases the standard of living of all its residents, the interna-

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