The articles brought together here, written over a period of fifteen years, continue and develop the central theme of my 1968 book *The Economics of Interdependence*: "how to keep the manifold benefits of extensive international economic intercourse free of crippling restrictions while at the same time preserving a maximum degree of freedom for each nation to pursue its legitimate economic objectives." This present volume focuses on the opportunities for and the constraints on national economic policy that are created by the fact that nations pursue their objectives in an environment in which goods, services, capital, and even labor are increasingly mobile internationally. The international economic environment thus strongly conditions the effectiveness of national economic policy. Earlier contentions notwithstanding, this is true in a regime of floating exchange rates as well as in a regime of fixed exchange rates, although there are important technical differences between the two environments.

The focus here is on the individual nation, possibly in interaction with others. A second volume, also to be published by The MIT Press, will address the nature and the consequences of alternative monetary systems—that is, the international rules and conventions that govern financial transactions among countries.

The articles will be much too theoretical or abstract for the tastes of some readers, yet far too loose and nonrigorous for others. The reliance on abstraction reflects my view that economic analysis of real events cannot proceed successfully without sharpening distinctions and differentiating among different circumstances. That in turn requires abstract reasoning—looking at limiting cases or possibilities as thought experiments. On the other hand, preoccupation with pure theory does not by itself illuminate the economic forces that actually operate in the world, which is the appropriate object of useful economic analysis. Thus, abstract theory must be adapted—
"loosened"—to allow for greater real-world complexity than that found in thought experiments concerned with limiting cases.

I find the judgmental use of abstract reasoning to help understand and illuminate actual circumstances or choices very satisfying. I hope readers will share this enthusiasm, which in my own case has been heightened by my occasional participation as a policymaker in the U.S. government (although not on a scale so grand as that covered by many of the articles collected here).

The articles are not arranged in the order in which they were written, but are grouped partly by difficulty of treatment—the first several are less formal and represent a somewhat easier introduction to the subject than some of the later ones—and partly by logical connection among the subjects examined. Except for corrections of typographical errors and other minor alterations, the articles have not been revised. Together, they reveal some evolution in my reflections, but the same underlying themes have absorbed me for nearly two decades.

Article 1 was written in 1970 for a Council on Foreign Relations study group. It attempts to lay out for foreign-policy specialists how growing interdependence will affect international relations, at first by engendering national frustration at the lessening ability to influence national events—a theme that is taken up somewhat more formally in articles 4, 7, and 11. It was written when fixed exchange rates still prevailed among major currencies, although President Nixon’s bombshell that eventually led to floating occurred in August 1971, as the article was going to press.

Article 2 leaps forward a decade. It was written, for the centenary celebration of the Wharton School of the University of Pennsylvania, in 1981—after external debt had become a source of concern, but well before the debt crises of August 1982. It takes the view that the world economic system in the early 1980s, while not without its risks, was fundamentally sounder and less subject to devastating decline than the world economy in the 1930s, although there were a number of striking parallels. Since 1981 the world economy has been put under enormous strain by a divergence of macroeconomic policies in the major countries. Monetary contraction combined with fiscal expansion in the United States, in the presence of fiscal contraction in the other major countries, has resulted in high unemployment in Europe and unprecedentedly large American trade deficits, and this has raised alarmingly the likelihood of an erosion of the liberal trading system that is predicted in the article.

Article 3 was written in 1980 for a Festschrift for Walter W. Heller, under whose tutelage I began my professional career at the Council of Economic
Advisers in 1961. That was an extraordinary and exhilarating experience. The Council included James Tobin and Kermit Gordon, while the staff included Kenneth Arrow, Richard Nelson, Arthur Okun, Robert Solow, and many other stimulating colleagues, working for an administration that was open to new ideas even if not always willing or able to implement them. At the Council I learned a tremendous amount about how government works, about the value and the limits of an academic economic training in helping to formulate and execute national policy, and above all about the importance of the acceptance of a set of consistent and interrelated guiding principles by the president and his chief aides if "policy" is to be something other than a collection of pragmatic ad hoc decisions.

Article 3 briefly characterizes the impact of the oil shocks of 1974 and 1979–80 on the world economy and the dilemmas they created for macroeconomic management. It describes the world economic situation as it appeared in late 1976 and the response of the new Carter administration (which I, as Undersecretary of State for Economic Affairs, had some role in formulating). In particular, it explains the underlying rationale for the so-called locomotive theory of world economic policy, under which the United States, Japan, and Germany (the three largest non-Communist national economies) would coordinate an expansionist policy to pull the world out of its slump and to relieve the dangerous debt burden on many developing and smaller industrialized countries while avoiding such a disturbance of trade relations among major economies as might occur with uncoordinated policies in a period of floating exchange rates. The article describes both the failures and the successes of this effort, also discusses the "public goods" dimension of the world demand for oil, and ends by noting the need to prepare for another major oil disruption before the end of the century.

Article 4 takes a much longer historical perspective on the formulation of national economic policy, linking it to the evolution of regional, national, and international markets for goods, investments, and even labor. I was invited to give the Wicksell Lectures in Stockholm in 1973, and I chose as my theme the influence of the economic environment—in particular, the extent of markets—on the effects and hence the character of various instruments of economic policy. This article adopts the perspective of nations as economic agents whose capabilities and choices are limited by the wider economic environment in which they operate. I believe this perspective was then novel at the international level, although it could be found in the literature on local governments within a nation. The article points out the limits on governmental action in an international system in which labor and capital are mobile.
Article 5 focuses on one issue implicitly raised in the previous article and is really an essay on the theory of government. It asks, from the perspective of an economist, what is the optimal jurisdictional area. It suggests that the entire world would be optimal except for the presence of public goods and diverse preferences among individuals for those public goods. Thus, “states” are formed to cater to these diverse preferences by offering different quantities and qualities of the public goods, and each family locates in the state catering most closely to its preferences. This way of looking at states is highly abstract and unrealistic as a historical characterization, but it indicates one rational source of resistance to the many pressures to shift authority to levels of government with ever greater geographical jurisdictions in response to geographical widening of markets.

Article 6, written in 1970, asks what it means to suggest that national capital markets are “integrated” with one another, offers some empirical evidence for the increasing integration of capital markets under the regime of fixed exchange rates prevailing during the 1960s, and suggests the limits that this increasing integration would put on national pursuit of economic policy (especially monetary policy). Not long after the writing, these restraints became all too evident, and countries attempted to relax them by shifting to flexible exchange rates in March 1973.

Article 7, published in 1969, addressed in a formal (nonempirical) simulation model the impact of increased openness in trade and financial transactions on the effectiveness of monetary and fiscal policies pursued by two interdependent countries with a fixed exchange rate between their currencies. In general, it finds that increased openness reduces the effectiveness of national economic policy, in that countries on average are farther from their targets than in an environment with less interdependence. Another finding is that the need for foreign-exchange reserves increases with increased openness. The article demonstrates that by coordinating their policies countries can on average remain closer to their desired positions, the gains being greater the greater is the interdependence.

By 1975 the major countries had moved to flexible exchange rates, and this provoked an outpouring of academic analysis on the impact of macroeconomic policy under flexible exchange rates. (It should be noted that before the switch many economists were advocating a move to flexible rates.) Article 8 attempts to review the then-prevailing analysis of a comparison of fiscal and monetary policy under fixed and flexible rates. Much more sophisticated work has been done since the article was first published, and the gist of that work is that some form of managed flexibility is generally optimal but that the exact rules for management depend crucially (and hence
unusefully) on the detailed objectives and economic structure of the country in question and on the disturbances it has to cope with. Article 8, however, finds that the claim that flexible exchange rates “insulate” economies from foreign disturbances was seriously misleading.

Article 9 shifts the perspective to economic policy in a small capital-importing country. The work was stimulated by my study of the economy of South Vietnam in the 1960s and by my conclusions that devaluation of the piaster could improve the country’s foreign-exchange earnings modestly and that currency devaluation could be used as an instrument of economic contraction in the expansionary environment. This result was at sharp variance with the conventional analyses of currency devaluation that existed at that time, which held that successful devaluation must be expansionary and therefore required monetary and/or fiscal contraction to sustain its success. I began a more systematic study of currency devaluation, empirical as well as theoretical, and some of my conclusions were given in the Frank K. Graham Lecture at Princeton in 1971. The article published here is a somewhat extended version of that lecture. I believe it is still relevant, despite many changes that have taken place since then, because many developing countries continue to be (or aspire to resume being) net importers of capital on government account, and in practice most of them continue to fix their exchange rates, engaging from time to time in substantial discrete currency devaluations of the type analyzed here.

Article 10, written with Jeffrey Sachs in 1984, reverts again to the capital-importing country, this time focusing on the appropriate size and composition of its external debt. The article’s novelty (due to Sachs) is that it addresses the incentives to default somewhat more systematically than had been done hitherto. It also draws attention to the crucial importance of the need to service foreign debt in external currency and to the implied need to invest foreign capital in ways that will save or generate foreign exchange. It finds that, with productively invested foreign borrowings, countries could sustain external debts considerable larger than the large external debts that were such a source of concern after the Mexican debt crisis of 1982. In short, debt problems in the early 1980s arose not so much because of the scale of debt per se as because of misuse of some of the debt, which, combined with a liquidity crisis which raised questions about the ability of countries to service their debts in the short run, resulted in a self-fulfilling prophecy as banks hesitated to lend new money.

The final article returns to the macroeconomic management of interdependent economies and the influence of economic structure (and especially the degree of openness) on the effectiveness of monetary and fiscal policy. It
draws heavily in its underlying theme on several of the earlier articles, but it formalizes that work somewhat and draws on contributions by others made in the intervening years.

The switch of major currencies to flexible exchange rates alters the nature of interdependence, but it has not altered the fact that growing interdependence creates new challenges to the formulation of economic policy and generally increases the gain from coordinating one's economic policy with one's major trading partners. This is a challenge that has not yet been met successfully, despite accumulating experience with the consequences of misaligned policies among the major industrial countries. The subject of this volume, then, is likely to grow rather than diminish in importance.