

HUDSON INSTITUTE STUDY OF
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THE FUTURE OF WORLD ECONOMIC DEVELOPMENT

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SummaryTHE FUTURE OF WORLD ECONOMIC DEVELOPMENT

1. The most likely global economic scenario through the end of the century is one of sustained economic growth, somewhat above rates experienced from 1973 to 1983, but not as high as from 1947 to 1973: annual growth rates will average $3\frac{1}{2}$ to $4\frac{1}{2}$ percent for the advanced countries to 1990, and 3 to 4 percent to the end of the century, and 5 to 6 percent for the developing countries to 1990, rising to $5\frac{1}{2}$ to $6\frac{1}{2}$ to the end of the century. Moreover, the international economy will show greater stability than during the past decade; cyclical variations will still occur, but not of the magnitude of the severe shocks that characterized the 1970s and early 1980s.
 - o A return to higher global growth will be fueled initially by the U.S. recovery. As the largest economy in the world, the U.S. remains an important stimulus to world growth. Prospects are good for strong U.S. economic performance based on productivity increases, new technologies, modernization of the service sector, more supportive government policies, and a new spirit of entrepreneurship and confidence.
 - o The Japanese economy will also recover and perform strongly during the 1980s.
 - o Prospects for the economies of Western Europe are less promising; they will recover gradually and grow moderately, with significant variations among individual countries.
 - o The developing countries, on average, are likely to continue to grow faster than the advanced industrial countries. However, resumption of growth rates of 5-6 percent will only be possible after a lag of 2-3 years as debt servicing burdens are reduced.
- II. The record of world economic developments since World War II suggests that as the advanced countries regain high rates of economic growth, the developing countries can return to or surpass their previous levels of performance.

- o The unprecedentedly high rates of economic growth achieved from 1947-1973 produced significant economic gains for the world's developing countries. For the first time in history, economic growth became a global phenomenon.
 - o With the decline in average rates of economic growth in the advanced industrial countries since 1973, the performance of the developing countries eventually suffered as well. This decline in growth rates stemmed from many causes and was intensified by policy actions in the industrial countries that did not recognize the transitory nature of some of the sources of growth of the preceding 27 years.
 - o Among the developing nations, those most open to the external environment seem, on average, to have performed better than those that have tried to insulate themselves. The high short-term costs of forcing the domestic economy to absorb oil price, inflation, and other external shocks appear to have been overcome relatively quickly by the benefits of rapid adjustment.
 - o Looking ahead, a modest improvement in average growth of the world economy is the most likely medium-term outcome. This growth initially in the industrialized world will benefit developing countries greatly, provided they can adopt and sustain policies that take advantage of this favorable external environment (compared to the past decade).
- III. The future nature and evolution of the global economy will depend on the following seven key trends among others:
- o Population growth - growth rates are declining but absolute increases in population raise serious problems in many countries, particularly relating to the creation of new employment.
 - o Trade and interdependence - The importance of economic relationships among countries have increased substantially. Now more than ever, both industrial and developing countries are buffeted by exigencies in international markets, though benefits of openness continue to exceed costs, on average. The benefits of openness can be expected to increasingly outweigh pressures for protectionism as growth of world trade is projected to expand more rapidly than global output.

- o Energy - Contrary to the consensus view, Hudson views expect stable or declining real energy prices for the rest of the century. Oil prices should become less sensitive to political or military events as source-of-supply diversification continues.
- o Inflation - Anti-inflationary policies will be maintained, in the advanced countries. The costs of inflation are now widely recognized. Moreover, those countries with better records of inflation control during the 1970s have tended also to experience high growth. With the large budget deficits in most industrial countries the burden of controlling inflation will be largely on monetary policy, at least for several years. Budget deficits, tight monetary policy, and fears of a renewal of inflation will persist and will keep interest rates high.
- o Global Debt - The global debt "crisis" is manageable. Short term and longer-term liquidity problems remain, however, and the primary long-term policy concern is the maintenance of sufficient private and official financing to facilitate investment and economic growth.
- o Technology - The world economy is entering a period characterized by a new wave of technology that will spur economic growth and produce extensive changes in the structures of economic activity in both advanced and developing countries. Yet, these technologies will also increase the adjustment problems of countries that have major investments in dated production and distribution methods.
- o Structural Adjustment - Major shifts in industrial structure, required by technological change, increased competition, and cost considerations, will force extensive movements of labor and capital, with important social and political consequences. These adjustments are occurring; and the sustained economic recovery in the U.S. is likely to reduce still further pressures for general, economy-wide protectionist responses to changes in comparative advantage and shifts in industrial structure.

THE FUTURE OF WORLD ECONOMIC DEVELOPMENT

I. INTRODUCTION

Significant changes took place in the world economic and political environment in the 1970s, creating new challenges for countries seeking to formulate effective policies and programs to assist the continued economic development of poorer countries. Since the first quarter-century after World War II had been a period during which many developing countries experienced the benefits of sustained economic growth for the first time, their expectations of future growth were and have remained high. The rude awakening that accompanied the global recession of 1974-75, the stagflation that continued into the early 1980s, the global recession of 1981-82, and the debt crises of 1982-83 have all contributed to a reconsideration of the feasibility of some previously accepted goals and of the means to achieve the general goal of economic development, but not of the long-term desire for economic development.

The record of world economic development has made it abundantly clear that high rates of world economic growth are a necessary, although not a sufficient, condition for the successful development of most countries that are still poor. Later sections of this study will examine more closely the growth prospects of specific countries and the alternative approaches to economic development that different countries may pursue. This paper analyzes the major forces that have dramatically affected global economic conditions in the past, with particular attention to the post-World War II period, and those that appear likely to exert a major influence on future world economic prospects till roughly the

end of the century. Our goal is to stimulate discussion, and, in turn, to assist in the formulation of policies for economic development in light of long-term global economic trends that seem to us to affect shorter-term trends. We have specifically avoided trying to be overly precise in a quantitative sense. Nor have we tried to present a unified view of the causes of economic development or of the "correct" policies to encourage higher rates of economic growth. Rather, based on our analysis of the past and of the major trends that seem to us most likely to characterize the global economy to the end of the century, we have tried to describe likely future prospects for the global economy and to suggest what appear to us to be appropriate policies to take advantage of these trends.

In an environment of continuing change and uncertainty, we find it useful to take specific steps to think through the possible implications of various alternative futures in the hope thereby of designing policies and programs that remain flexible and dynamic as conditions change. There will never be unanimous agreement on the future; even if for some reason such agreement were to arise, one would then have to question whether it were part of a bandwagon effect, and for this reason likely to be inaccurate. The role of this analysis is not to suggest definitive answers, which in any case would change over time, but rather to develop a framework that will enable policymakers to learn from new information and new conditions and thereby establish a basis to improve on previous answers.

II. HISTORICAL OVERVIEW: BASIC PERSPECTIVES ON GROWTH AND DEVELOPMENT

Economic development, in the sense of sustained increases in per capita income, is a relatively new phenomenon in world history. The industrial revolution, which began in Britain in the final quarter of the 18th century, initiated a process of economic expansion in approximately 16 countries that persisted even in the face of bad harvests, various wars, and an extraordinary rise in population--problems that till then had terminated periods of prosperity. This process of economic development began to spread widely throughout the world only after World War II, when many of the techniques and concepts of modern production and organization began to be copied and adapted in many previously non-industrial countries. A self-generating process, however halting, appeared at least to be under way.

The dramatic changes in the global economic and political environment that occurred in the 1970s raised the prospect of lower rates of economic growth and continuing economic and political instability in the years ahead. The early 1980s have also raised new concerns about high debt levels in developing countries, continued low prices for basic commodities, and increasing restrictions on international trade. At the same time, new technologies, an accumulation of experience in dealing with the new problems of recent years, and major progress in adjusting to the changed conditions of the past decade offer hope for higher rates of economic growth and improved economic stability, relative to the 1970s.

Economic development is inevitably uneven, and influenced by many factors. Among them, perhaps the most important is the pace and pattern

of world economic growth itself. There is, in other words, a basic interaction between the continued growth of the advanced countries and the continued growth of the developing countries--an interaction that is two-way, but not so clearly understood that one can measure exactly the causes and effects of growth in one or the other group. Developing countries do measurably better when the advanced countries do well; the reverse is also true, but less clearly so. In this sense, the developing countries have to find ways of adjusting their growth strategies to the achievements of the advanced countries, which in turn have to find ways of adapting their policies to what is likely to be a period of generally slower growth than occurred in the 25-year period prior to 1973--even as growth improves somewhat from that of the past decade. Thus, the responses of both groups of countries to the new conditions facing them to the end of the century require a rethinking of the strategies and policies for promoting economic development worldwide.

A. A Century of Economic Progress

Modern economic growth can be divided into four phases:^{*} The first, prosperous; the second, disastrous; the third, highly dynamic; and the fourth--in which we are currently living--a mixed period that the late Herman Kahn described as neither fully healthy or really sick. During La Premiere Belle Epoque (the first good era, 1886-1913), the economies of what are now the advanced industrial countries grew at an unprecedented pace. By contrast, during La Mauvaise Epoque (the bad era, 1914-1947),

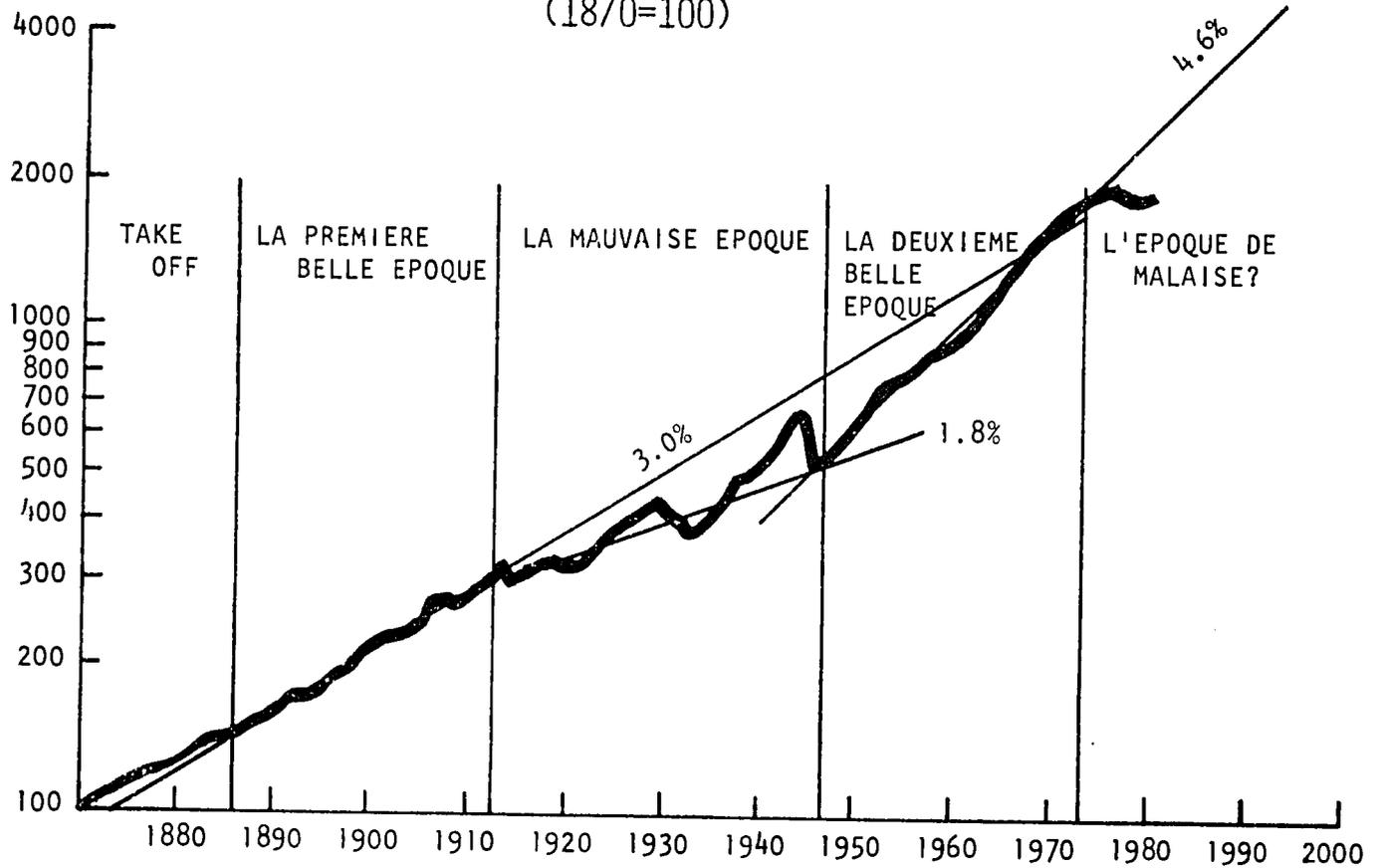
^{*} There was an earlier takeoff period that we do not discuss in detail here. For further discussion of the periodization used in this section, see Herman Kahn, World Economic Development (Boulder, CO: Westview Press, 1979), passim and Chapter Four.

they grew only about half as rapidly. During this "bad era," many disturbing and unpleasant events took place: two world wars, the rise and fall of fascism, two communist revolutions, and the Great Depression. During La Deuxieme Belle Epoque (the second good era, 1948-1973), the advanced industrial countries experienced extraordinarily good times, although few people who lived in these countries were aware of this at the time, mainly because high growth came to be seen as "normal." Various trends that began or became evident in the mid-1970s led Kahn to argue that the world had moved into a new period of economic history, which he called L'Epoque de Malaise (a troubled era, beginning in 1974). By this, Kahn meant a period that would be neither necessarily prosperous nor necessarily depressed, but one in which the achieved rates of economic growth would depend to a considerable extent on public attitudes and corresponding government policies in the advanced countries. Data for 16 of the advanced industrial countries, as compiled by Angus Maddison, clearly show these four periods in terms of aggregate output (See Figure 1).

While the advanced industrial countries grew rapidly in La Premiere Belle Epoque, the actual achieved growth rate averaged only 3.0 percent a year, or only two-thirds of the 4.6 percent average growth achieved in La Deuxieme Belle Epoque. Moreover, except for Russia, the rate of economic growth for the rest of the world at that time was almost negligible, often failing to keep up with population growth. The phrase "Belle Epoque" is not meant to imply there were no problems in the more advanced countries, to say nothing of the rest of the world, during either of these two periods. Nor does it mean to imply that the timing of either of these periods was similar for all countries. Rather, the idea is

Figure 1

AGGREGATE GDP OF 16 ADVANCED INDUSTRIAL COUNTRIES*
(1870=100)



* AUSTRALIA, AUSTRIA, BELGIUM, CANADA, DENMARK, FINLAND, FRANCE, GERMANY, ITALY, JAPAN, NETHERLANDS, NORWAY, SWEDEN, SWITZERLAND, UNITED KINGDOM, UNITED STATES.

SOURCE: ANGUS MADDISON, "PHASES OF CAPITALIST DEVELOPMENT," BANCO NAZIONALE DEL LAVORO QUARTERLY REVIEW (JUNE 1977), UPDATED USING DATA FROM THE OECD.

simply to look at the record of development in broad terms to see what general trends, if any, might be discernible.*

Evidence from many sources suggests that a pattern of similar problems emerged in most of the advanced industrial countries by the mid-1970s: namely an unprecedented combination of relatively high unemployment, excess industrial capacity, and inflation. The emergence of such a widespread and persistent malaise in the 1970s can reasonably be explained partly by structural (including institutional) factors and partly by an accumulation of unwise fiscal and monetary policies.** Even if these latter policies had been much improved, some degree of malaise would probably have occurred anyway, if presumably less widespread and persistent. Indeed, this combination of inflation and underutilized capacity and labor plagued most of the advanced industrial countries for the better part of a decade, leading to the creation of the term "stagflation" as a means of describing this situation. Stagflation turned more to stagnation, in the traditional sense of the term, after 1980, as inflation rates began to fall but investment and consumption failed to pick up.

* The importance of international economic conditions to the spread of economic development is strongly supported by the historical record. Internal conditions largely determine which countries are able to take advantage of a positive external environment, but with few exceptions such a positive environment was a necessary prerequisite to growth. See Lloyd G. Reynolds, "The Spread of Economic Growth to the Third World," Journal of Economic Literature, Vol. XXI, No. 3 (September 1983), pp. 941-80.

** We define a structural problem as any economic problem that cannot be fixed largely by fiscal or monetary policies (though they are often strongly affected by these). Structural problems can involve institutional and value issues as well as structural imbalances in industries or the labor force. See E.M. Bernstein, "Structural Problems and Economic Policy: The U.S. Experience," in Irving Leveson and Jimmy W. Wheeler, eds., Western Economies in Transition: Structural Change and Adjustment Policies in Industrial Countries (Boulder, CO: Westview Press, 1980), Chapter 7.

More recently, at least in the U.S., growth has picked up, based mainly on consumption, and leading many to believe that this growth will continue and in fact lead the other advanced countries and various developing countries into a period of sustained growth at visibly higher rates than those achieved in the 1970s and early 1980s (if also lower than those achieved in the period from 1948 to 1973). On the other hand, some argue that continued high real interest rates will choke off prospective investment demand, and thus the current U.S. recovery will be short-lived.

In general, the periodization used above raises the following questions for the future: Will the economic conditions of the 1970s and early 1980s lead to a La Deuxieme Mauvaise Epoque, a second bad era, comparable to the earlier cycle? Alternatively, will the instability of recent economic patterns persist and lead in turn to a continuing stop-go trend or to continuing stagflation? Or, alternatively yet again, will global economic conditions improve, and if so, how soon and how much?

Providing answers to these questions requires us to look carefully at the causes behind the high growth that followed World War II, and the stagnation and even negative growth that then occurred. From that base we can assess the prospects of the global economy for the rest of the century.

B. The Post-World War II Years of High Growth

After World War II, the world economy experienced a period of unprecedented growth and change. From 1947 to 1973, global output grew 5 percent per year, while growth in the volume of international

trade approached 9 percent per year. Moreover, and contrary to many preconceptions, the developing countries participated increasingly in this rapid growth. Non-oil exporting developing countries grew, on average, 5.6 percent a year from 1960 to 1972, while major oil-exporting countries grew 7.2 percent over the same period. Real per capita gross national product for developing countries, excluding high-income oil exporters, grew 3.1 percent annually, on average, from 1955 to 1972.*

Meanwhile, economic interdependence reached levels not experienced since before 1913.** The composition of international trade also became far more complex. Before World War I, this trade was dominated by the exchange of raw materials for manufactured goods. After World War II, trade became dominated by manufactured goods, with intra-industry trade representing a major component (from 38 percent of total trade of nine industrial countries plus Australia in 1954 to 50 percent in 1967).*** One estimate found that 46 percent of U.S. trade in 1974 represented trade among divisions of corporations (intra-firm trade).****

This period of rapid world growth in both output and trade abruptly ended in 1973. The subsequent decade was characterized by shock and uncertainty. Many have since tried to explain this change by focusing

* Data drawn from International Monetary Fund, Annual Report, 1978; and World Bank, World Development Report, 1983.

** Robert Solomon with Anne Gault, The Interdependence of Nations: An Agenda for Research (Washington, D.C.: The Brookings Institution, December 1977), pp. 12-24.

*** Herbert G. Grubel and P.J. Lloyd, Intra-Industry Trade (New York: John Wiley and Sons, 1975).

**** Commission on Transnational Corporations, Transnational Corporations in World Development: A Re-Examination (United Nations: March 20, 1978), p. 43.

on the policies and actions of the Organization of Petroleum Exporting Countries (OPEC), which are frequently cited as the major cause of the decline in growth that began in 1973. In our view, the rates of economic growth achieved by the advanced industrial countries between 1948 and 1973 were, for a variety of reasons, unsustainable over the long term, and in this sense bound to decline at some point, with or without the specific pressures applied by OPEC in late 1973. Indeed, we argue that the general economic and political environment of the late 1960s and early 1970s, when combined with specific conditions working to lower the potential growth rates of the advanced industrial countries, made the world economy as a whole particularly susceptible to the specific shocks it was subjected to at that time. The abruptness of the decline and much of the accompanying instability are largely a result of the oil price rise, but not the basic decline itself. Moreover, the policy responses of the advanced countries--particularly an unwillingness on the part of the U.S. to adapt quickly to higher energy prices and the willingness of several countries to overaccommodate to these higher prices by means of inflationary policies--almost certainly contributed to a lengthening and deepening of the adjustment burdens in other advanced and developing countries.

Why, one might ask, were the high growth rates of the first 27 postwar years unsustainable? ^{*} For one thing, the immediate post-World War II period saw unexpectedly high levels of demand interacting with unusually

^{*} A more complete discussion of these questions is provided in J.W. Wheeler, "Stagnation in the West?," HI-3027/1/2-DP (Croton-on-Hudson, N.Y.: Hudson Institute, July 1979).

promising supply conditions.* In countries that had experienced serious physical damage from the war, a huge demand existed for reconstruction and/or rehabilitation of equipment and infrastructure. To the extent that wealth had been accumulated by individuals during the war (most importantly in North America, where savings rose but physical damage was negligible), demand for consumer durables began a long and sustained expansion, most notably in housing and automobiles and somewhat later in household durables. In addition to various construction needs created by wartime destruction, a shortfall in plant, equipment and infrastructure investment still remained from the Great Depression. Meanwhile, the war effort had produced a wide range of technological innovations, leading to a postwar backlog of opportunities in new production methods and new products. All of these factors combined in ways that confirmed decisions to expand and encouraged further optimism.**

These various sources of rapid economic growth in the early postwar years began to decline significantly in importance by the mid-to-late 1960s in the U.S., and by the early 1970s in other advanced industrial countries. Much of the catch-up stimulus from the depression and the war years had dissipated by the early 1960s. Population growth began to slow--signaling future declines in housing and consumer durable markets

*The initial expectation was of an extended postwar depression along the lines of, though perhaps not as severe as, that encountered after World War I. For a discussion of the various sources of growth during the postwar period, see Edward F. Denison, Why Growth Rates Differ (Washington, D.C.: The Brookings Institution, 1967).

**This is one of many forms of what Gunnar Myrdal has identified as "virtuous cycles." Herman Kahn called them "self-fulfilling prophecies." See Gunnar Myrdal, Asian Drama: An Inquiry into the Poverty of Nations (New York: Pantheon, 1968), and Kahn, op. cit.

(although such declines in North America were hidden behind the bulge in "nesting-age" groups). Trade barriers among the advanced countries had already been reduced to such low levels that further reductions could have only a limited effect in expanding total trade volumes. Moreover, markets were already so large that, for a broad range of industrial enterprises, few gains could be realized from further economies of scale. To be sure, in new industries and in industries that were otherwise still constrained by national boundaries, substantial economies of scale remained to be achieved, but in general the potential gains from economies of scale declined, relative to earlier postwar years. By implication, and as we try to emphasize subsequently, the main efficiency gains of continued market growth began to be achieved by producers in the developing countries, as they expanded to larger-scale activities, permitting them to realize economies of scale that had previously been restricted to advanced countries.

During this same period, technological gaps between the U.S. and the other industrial countries were also substantially eliminated. This convergence of productive capabilities was based on the acquisition of advanced technological processes by Western Europe and Japan and on the increase in capital per worker that accumulated during the period.* Concomitantly, the bulk of the shifts in industrial structures that accompany economic growth and contribute measurable increases in productivity--from agriculture to manufacturing and to some degree from manufacturing to services--was either largely completed or at least well advanced. Moreover,

* John P. Stein and Allan Lee, Productivity Growth in Industrial Countries at the Sectoral Levels, 1963-1974 (The RAND Corporation, R-2203-CIEP, July 1977); and Dale Jorgenson and Mieko Nishimizu, "Closing the Technology Gap: The United States Versus Japan, With Some Inferences for Other Industrial Countries," New International Realities, Vol. 3, No. 1 (Winter 1978), pp. 7, 15.

many of the shifts in industrial structure that did occur during this period involved a considerable increase in the provision of government services, which typically yielded low or even negative rates of productivity growth.^{*} Other factors, especially new legal and regulatory burdens, contributed to a slowdown in productivity growth.^{**}

In addition to this decline in what would otherwise be positive sources of economic growth, new producers emerged during and after the late 1960s who challenged previous industry leaders in an increasingly global marketplace for basic industrial goods. Declines in growth sources, and this new competition led to disinvestment in important industries in the advanced countries, with a more than proportionate reduction in demand for capital goods.

Beginning in the late 1960s, the nature of business cycles in advanced countries began to change to reflect an increased importance of monetary, relative to real, factors in causing business cycles and a corresponding increase in the importance of global interdependence. While these generalizations are not meant to characterize all countries and all business cycles, they do point to a significant shift in the main causes of business cycles in the largest of the industrial countries after the mid-1960s. The most important example of this shift is the sustained increase in inflation rates that began to affect the world economy by the mid-1960s. Rates of inflation ratcheted upward, with each succeeding business cycle

* Victor R. Fuchs, The Service Economy (New York: National Bureau of Economic Research, 1958).

** For a detailed discussion of these factors in the U.S., see Edward Denison, "Effects of Selected Changes in the Institutional and Human Environment Upon Output per Unit of Input," Survey of Current Business, 58, No. 1 (January 1978), pp. 21, 44.

producing a slightly higher level at which the increase would level off. By the end of the decade, various domestic and international forces behind this ratcheting effect had combined to create substantial inflationary pressure worldwide.

Worldwide inflationary pressures led in time to a general tightening of monetary policies that appears to have been a major factor in the more or less simultaneous growth recessions in the advanced industrial countries in 1970 and 1971.* This joint economic slowdown and the coincidence of several important elections in 1972 created incentives for a return to expansionary policies in 1971 and 1972. Also supporting a broad-based shift to expansionary policies at this time was the accelerating collapse of the rules of procedure set up in the Bretton Woods system of fixed exchange rates. In effect, deficit countries no longer felt obliged to follow deflationary policies, and surplus countries successfully avoided their implicit responsibility to raise voluntarily the exchange values of their currencies. Meanwhile, continuing and increasing U.S. trade deficits led, through the dollar's role as a reserve currency, to a continued "exporting of inflation" to the rest of the world. A cyclical recovery from the 1970-71 growth recessions would probably have occurred in any case, but the political incentives for expansionary policies, when combined with the global liquidity

* One of the best descriptions of economic events and policies among the advanced industrial countries during this period (the late 1960s through the mid-1970s) can be found in Paul McCracken, et al., Towards Full Employment and Price Stability (Paris: Organisation for Economic Co-operation and Development, June 1977). The following paragraphs summarize this complex period only briefly. Many of the assertions made herein can be supported with the data and analysis in the McCracken study, but the interpretation presented here differs in some respects from the conclusions.

growth caused by excess dollars, produced a tremendous monetary stimulus that soon converted a normal cyclical recovery into an unusual speculative boom.

This inflationary boom had two major consequences for subsequent policy behavior: First, the extraordinary rates of growth following the 1970-71 recession exacerbated already unrealistic perceptions about achievable growth and unemployment rates, which, in turn, led both advanced and developing countries to expand investment in a wide range of basic manufacturing industries simultaneously. Secondly, it led authorities in most of the advanced industrial countries to tighten monetary policies early in 1973 to combat inflation. This made the advanced countries particularly vulnerable to the massive deflationary shock stemming from the energy price increases later that year. Even in the absence of these energy price increases, the restrictive policies put in place in early 1973 would have resulted in a slowdown or decline in economic activity in 1974. The "oil shock" sharply exacerbated that decline. La Deuxieme Belle Epoque ended with a speculative boom-bust cycle unprecedented in the post-World War II period.

C. Post-1973: From Shock to Uncertainty

Given the high expectations of the future built up before 1973 in both the advanced and the developing countries, the policies followed in response to the "oil shock" and the subsequent recession seemed at the time to be less unreasonable than in hindsight they proved to be. If average world growth rates had returned to the 4.5-5 percent range that seemed "normal" at the time, the decision to try to spread the domestic

costs of energy price increases out over time or even to try to offset them completely through price controls, deliberately inflationary expansion, and increased international borrowing would subsequently have resulted in much lower inflation rates and much less economic distortion than actually occurred. However, it is now clear that the speculative boom of 1973, the sharp increases in energy prices of later that year, and the collapse of the Bretton Woods fixed exchange-rate system were all more symptoms than causes of change. Thus, the severity of the 1974-75 recession stemmed primarily from excessive expectations about growth potential, leading in turn to government policies, business strategies, and consumer responses that were also out of line with underlying fundamentals.

Indeed, one might well argue that the unexpectedly high inflation of 1972-74 was a microcosm of a much broader gap between expectations and fundamentals. This hypothesis is strengthened by looking at responses within the various countries. Many countries tried either to avoid the impoverishing impact of the oil price shock through price controls or to mitigate the deflationary effects through excessive monetary expansion.* Of course, "excessive" is a matter of interpretation. At the time, continued monetary restraint, in the face of the recession that was clearly

* Canada instituted a subsidy on imported oil. The U.S. prevented prices of domestically produced oil from rising to the level of world prices. The Netherlands and Sweden passed the oil price change through to domestic goods, but offset this increase by cutting indirect taxes and withholding that part of the average price increase due to the oil from the wage bargain. In most other OECD countries, the oil price rise was passed on to the domestic market rather quickly, with monetary accommodation and thus the inflationary consequences stronger in some countries than in others.

emerging, was generally viewed as inappropriate, although the specific histories of monetary policy varied significantly from country to country. Indeed, after 1973, the advanced industrial countries vascillated more than ever between their concern for unemployment on the one hand and inflation on the other. This vascillation led to stop-go economic policies, which in turn intensified the economic instability and uncertainty that had already been caused by the adjustments being made to the energy price increases, lessened growth potential, and changing patterns of international competitiveness characteristic of these years.

As a group, the developing countries continued to grow more rapidly than the advanced industrial countries after 1973.* Indeed, continued developing country demand for industrial country exports prevented the recession that occurred from becoming much more severe. This rapid average growth masked different policy responses in the developing countries that displayed at least as great a diversity in reactions to the energy price rise and the 1974-1975 recession as those in the advanced industrial countries. The ability to maintain high growth rates in the face of increased energy prices and sluggish advanced country growth reflected a number of factors that varied widely in importance among countries. These included an ability to utilize high levels of international reserves,

*The oil exporting countries experienced significant income gains during this period, even though their real output proved to be highly sensitive to the business cycle in the developed countries. The oil-exporting countries experienced negative growth in real output in 1975, along with the advanced countries. Among the oil importing developing countries, growth in various country groups also tended to follow trends in the advanced industrial countries (i.e., downward), but since on average they fell from a considerably higher level than the advanced countries, their low point growth rates were still higher than the advanced countries. These country group aggregates mask significant differences among individual countries.

to draw on new sources of official finance, to continue exporting in spite of depressed economic conditions worldwide, to maintain and expand domestic savings rates, and, perhaps most importantly, to expand borrowing from private capital markets.*

Rapid growth in international borrowing by the developing countries was merely one aspect of an extraordinary recycling of petrodollars by global money and capital markets. The ability of private markets to respond to the need to move the huge and sudden accumulation of financial surpluses by the oil exporting countries to deficit countries far surpassed general expectations. Not surprisingly, these adjustments did bring certain weaknesses to light, such as the Herstatt crisis in 1974 and the balance sheet realignments represented by the collapse of tanker loans and real estate investment trusts in the U.S. In any case, the overall efficiency and rapidity with which financial markets handled OPEC surpluses almost certainly moderated the severity of the recession.

Among the advanced industrial countries, several lessons appear to have been learned from the experiences of the first half of the 1970s: Countries that accommodated to much of the inflationary impact of the oil shock began to recognize the disastrous effects of high rates of inflation on their domestic activity. This led to a shift in macroeconomic policies away from accommodation towards greater monetary stringency, which contributed in turn to a reassessment of the productivity reducing

* A large volume of literature has been produced since 1974 addressing the developing country debt problem. See, for example, L.G. Franko and M.J. Seiber, Developing Country Debt (Elmsford, NY: Pergamon Press, 1979). For useful summaries of current information and changing perceptions over time, see the International Monetary Funds's Annual Report for each year since the early 1970s, and, since 1978, the World Bank's World Development Report.

effects of a broad range of policies built up over the postwar period. The U.S. and the U.K. are the principal examples, though other countries did follow this pattern to a lesser extent. Another pattern that emerged in the late 1970s was the belated recognition that underlying growth potential in the advanced countries had indeed declined, though significant differences remained as to expectations of future growth prospects. Finally, a painful consensus emerged that slower growth, higher energy prices, and changed international competitiveness were all going to require substantial structural adjustment in important basic industries more or less across the board.

Not surprisingly, developing countries pursued a wide mix of responses to the problems of the first half of the 1970s. Some countries passed the energy price increases through to their domestic economies rapidly, while others attempted to protect the domestic sector by subsidizing the consumption of energy along the lines of the U.S. Similarly, some countries were highly accommodating to external inflationary pressures, often exacerbating the effects of these pressures through domestically-based inflation, while others tried at least to restrict the inflationary effects to those that derived from external sources only. As in the industrial countries, certain lessons seem to have been learned by the end of the 1970s. For one thing, those countries that tried to quickly adjust to the external inflationary pressures adjusted quickly to the new global environment, more quickly and more completely than countries that tried to stretch the adjustments out over a larger period of time. Moreover, countries that had borrowed heavily in international markets to support consumption rather than investment began to face domestic

adjustment problems and greater caution on the part of international lenders.*

Before the various lessons that were being learned (whether quickly or slowly) could be applied in more than an incipient fashion, the world economy experienced a second "oil shock" that, when combined with the earlier shift to anti-inflation policies in some countries, created a second recession that extended itself deeper and longer than most governments and analysts expected. The restraints applied to contain the external inflationary impact of the second "oil shock" relied to a fault on monetary policy, especially in the face of large and increasing government budget deficits in the advanced countries (most importantly in the U.S.). These contributed to unusually high real interest rates, which increased the severity of the recession. These tight monetary policies also forced much more extensive adjustment to the structural changes that had been building up even in the late 1960s and early 1970s.

The 1981 recession in the industrial countries had a much more serious impact on developing countries than did the 1974-75 recession. Industrial country import markets contracted sharply. Commodity prices fell precipitously in real terms, to the lowest level since World War II. The large rise in real interest rates not only affected the cost of new borrowing but, because of the large accumulation of floating rate loans contracted

* Like the debt issue, much attention has been paid to the issue of developing country adjustment to global shocks and instability. Due to lags in the availability of accurate data, empirical analyses of the adjustment process are only now providing results for the period ending in the late 1970s. A good survey of some of these research findings is Pradeep K. Mitra, "World Bank Research on Adjustment to External Shocks," The World Bank Research News, Vol. 4, No. 3 (Fall/Winter 1983), pp. 3-14.

over the previous few years, fell most heavily on the cost of existing debt service. Combined with the burden of the new oil price rise, these factors seriously constrained the ability of developing countries to maintain high rates of economic growth. Thus, not only were developing countries unable to help moderate the global recession by maintaining high levels of imports from industrial countries, as they had done in 1974-75, but their generally weak performance in the wake of the second "oil shock" probably intensified the recession.

The global recession and the plight of many developing countries stimulated well-founded concerns about the continued stability of international money and capital markets. Debt problems remain serious for a number of countries, but as the global economy slowly emerges from this most recent recession, its underlying capability to adjust is becoming more apparent. For one thing, a fundamental shift to, or emphasis on, anti-inflationary policies appears to be permanent. In advanced and developing countries alike, across most of the political spectrum, there has been a much increased recognition that attempts to insulate domestic consumers from impoverishing events such as "oil shocks" leads to much more severe domestic adjustment problems later on. Evidence through the 1981-82 recession supports the point made earlier that those countries that adjusted most rapidly to "oil shocks" and that relied more heavily on market-oriented processes in guiding their internal and external policies were also able to keep inflation under better control over the medium term than those that tried to spread the inflationary effects out from the beginning or to fend them off through price controls and other forms of direct intervention in the marketplace. Moreover, better inflation

control has been consistently associated with higher economic growth as shown in Table 1. This data suggests that the more serious pursuit of anti-inflationary policies currently in effect are likely to lead to improvements in economic performance.

If this shift to anti-inflationary policies along with some improvements in fiscal policy can be maintained successfully, and if adjustments in industrial structure in response to market forces is also maintained, the above review suggests that future economic prospects will be significantly improved. Succeeding sections of this paper discuss in greater detail the important positive and negative forces at work in the current environment and alternative scenarios for the global economy through the end of the century.

Table 1

NON-OIL DEVELOPING COUNTRIES:
GROWTH RATES OF COUNTRIES CLASSIFIED BY INFLATION RATES
AND BY DEGREE OF SUCCESS IN REDUCING INFLATION¹

	Compound Annual Growth Rates		Changes in Compound Annual Growth Rates	
	Average	Median	Average	Median
Three Year Periods				
Ended in 1975				
Low-Inflation Countries	4.0	4.0	-0.8	-0.7
High-Inflation Countries	3.9	4.2	-1.5	-1.0
"Successful" Countries	4.1	4.3	-1.2	-0.9
"Unsuccessful" Countries	3.8	4.1	-1.2	-0.9
Ended in 1978				
Low-Inflation Countries	5.9**	5.5	1.9*	1.1
High-Inflation Countries	4.3	5.0	0.4	0.4
"Successful" Countries	6.0**	5.5	1.7	1.1
"Unsuccessful" Countries	4.3	4.6	0.6	0.4
Ended in 1981				
Low-inflation Countries	4.0**	4.2	-1.3*	-0.8
High-Inflation Countries	2.6	2.4	-2.3	-2.6
"Successful" Countries	3.9**	4.2	-0.9***	-0.5
"Unsuccessful" Countries	2.7	2.9	-2.8	-3.0
Six-Year Periods				
Ended in 1981				
Low-Inflation Countries	4.8**	4.7	0.7***	0.1
High-Inflation Countries	3.5	4.2	-1.4	-1.2
"Successful" Countries	5.0***	4.7	0.9***	0.6
"Unsuccessful" Countries	3.3	3.9	-1.5	-1.1

¹ An asterik indicates that each estimate so designated is significantly greater at the 90 (*), 95 (**), or 99 (***) percent confidence level than the corresponding estimate immediately below it. For country classification, see the source.

Source: International Monetary Fund, World Economic Outlook, Occasional Paper 9 (1982), p. 209.

III. MAJOR INFLUENCES ON GLOBAL ECONOMIC PERFORMANCE

The preceding section outlined various long-term forces that have shaped today's global economic environment. This section describes the major factors likely to influence future global economic performance and ways that various policy measures might modify these factors. The discussion assumes that, while different countries will respond in various ways to the economic challenges they face, depending largely on domestic conditions, the ability of countries to take advantage of the external economic environment has been and will continue to be a key factor determining their economic performance.

As discussed in Section II above, the period from 1947 to 1973 witnessed an extraordinary spread of economic development around the world--more so than in any previous period of world history. In part because of this extremely positive global environment, the critical role in a country's development that stems from its ability to take advantage of the external environment was less well recognized than it is today.* The longer record of successful and unsuccessful development experiences among countries that is now available--encompassing countries with different resource endowments, political systems and cultures--suggests that externally-oriented development strategies have tended to achieve better results than internally-oriented strategies.

As also discussed above, the past decade was unusual both in the severity of the forces affecting the global economy and in the number of significant changes that occurred simultaneously. Some of these

* Cf. Reynolds, *op. cit.*

changes were in fact continuations or accelerations of longer-term trends (e.g., slowing population growth or shifts in the composition of employment from manufacturing to services). Others were more discontinuous (e.g., the inflation explosion of the early 1970s and the oil price increases). As both kinds of changes work their way through the system, the period of shock and uncertainty that characterized the past decade is now being followed by an extended period of adjustment. Many short and medium-term factors will influence the exact nature of future trends, but in our view certain fundamental factors will underlie any scenario of extended adjustment. This section identifies seven factors that seem to us particularly important in attempts to understand the economy of the future. These are: (A) population growth; (B) trade and global economic interdependence; (C) energy prospects; (D) inflation prospects; (E) global debt; (F) technology trends; and (G) structural change and adjustment itself.

A. Population Growth

Since World War II, as developing countries have gone through the demographic transition that is one of the major characteristics of economic development, they have experienced, on average, historically unprecedented rates of population growth before birth rates began to fall.* These increases in population contributed to widespread fears of a Malthusian crisis. Such fears of an exponentially growing world

*The demographic transition is the technical name given to a process that has been observed in all advanced and many developing countries as they become more affluent, in which first life expectancy rises and mortality rates decline, resulting in population growth, followed by a decline in birthrates and population growth.

population have slowly been relaxed by expectations that population growth will taper off, more or less in line with historical observations of how populations behave with increased affluence. Nonetheless, differential patterns of demographic change among and within specific countries represent a serious source of pressure for social and economic change well into the next century.

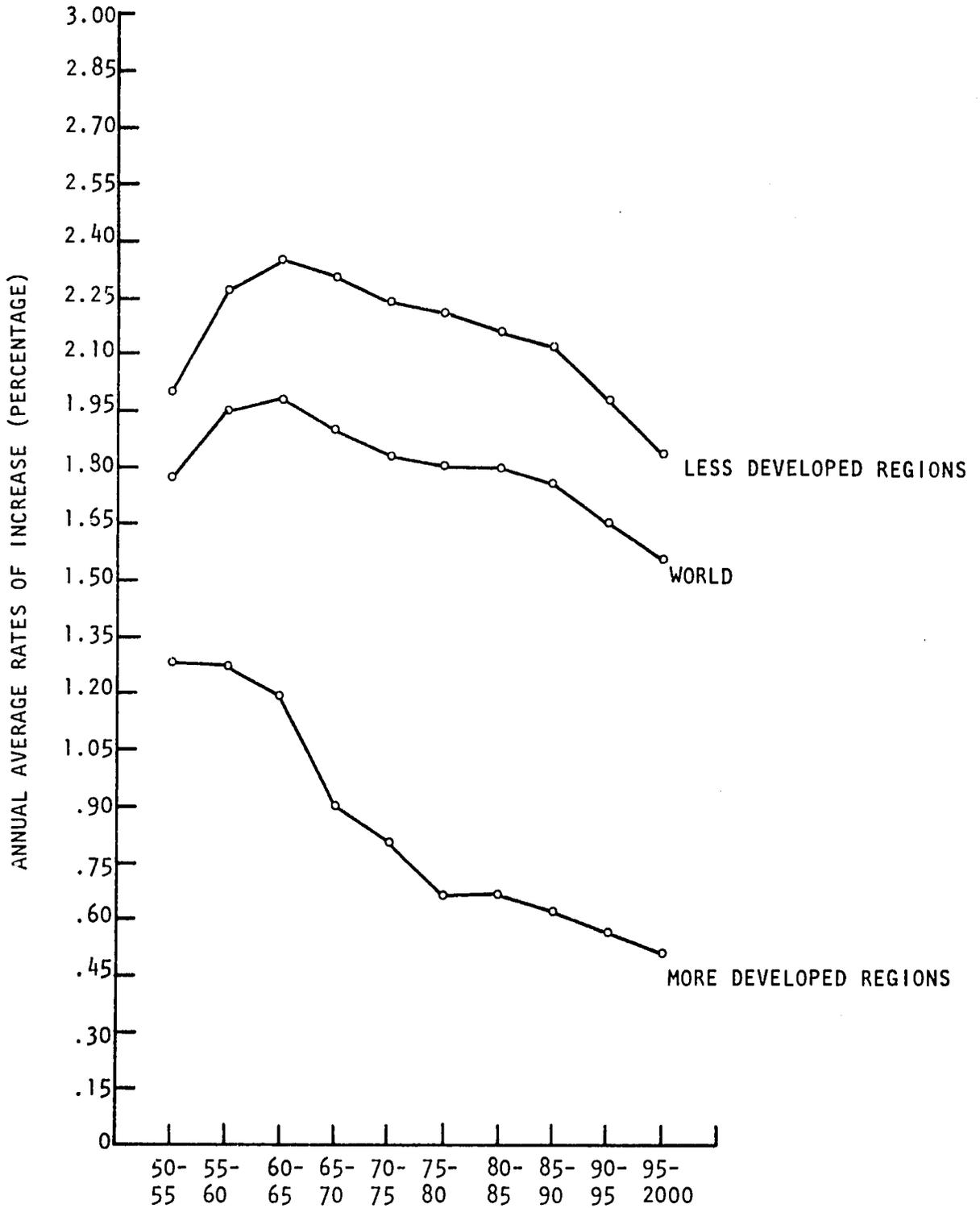
Data and projections from the United Nations 1978 population assessment show that the aggregate rate of world population growth peaked in the early 1960s.* The more developed countries have had declining population growth rates at least since the 1950s (see Figure 2). Therefore, the aggregate peaking of world population growth reflects a more recent peaking of population growth in the developing countries. The importance of this one fact can hardly be overemphasized, since it strongly suggests that a Malthusian vision for developing countries is, at least in terms of population growth, profoundly wrong. At the same time, this fundamental change in aggregate population growth masks important dissimilar trends among various regions and countries (see Figure 3).

In terms of the absolute size of population, extensive growth will continue in some regions of the world, notably Africa, where growth rates will not peak until at least the early 1990s. Such high growth regions help explain why, from an estimated world population of slightly over 4 billion in 1975, the United Nations projections estimate a world population of about 6.2 billion persons in the year 2000--or a 50 percent

* United Nations World Population Trends and Prospects by Country, 1950-2000: Summary Report of the 1978 Assessment (New York, ST/ESA/FER. R/33, 1979). Projections for some specific countries have been modified since this publication, but the overall patterns revealed do not change significantly.

Figure 2

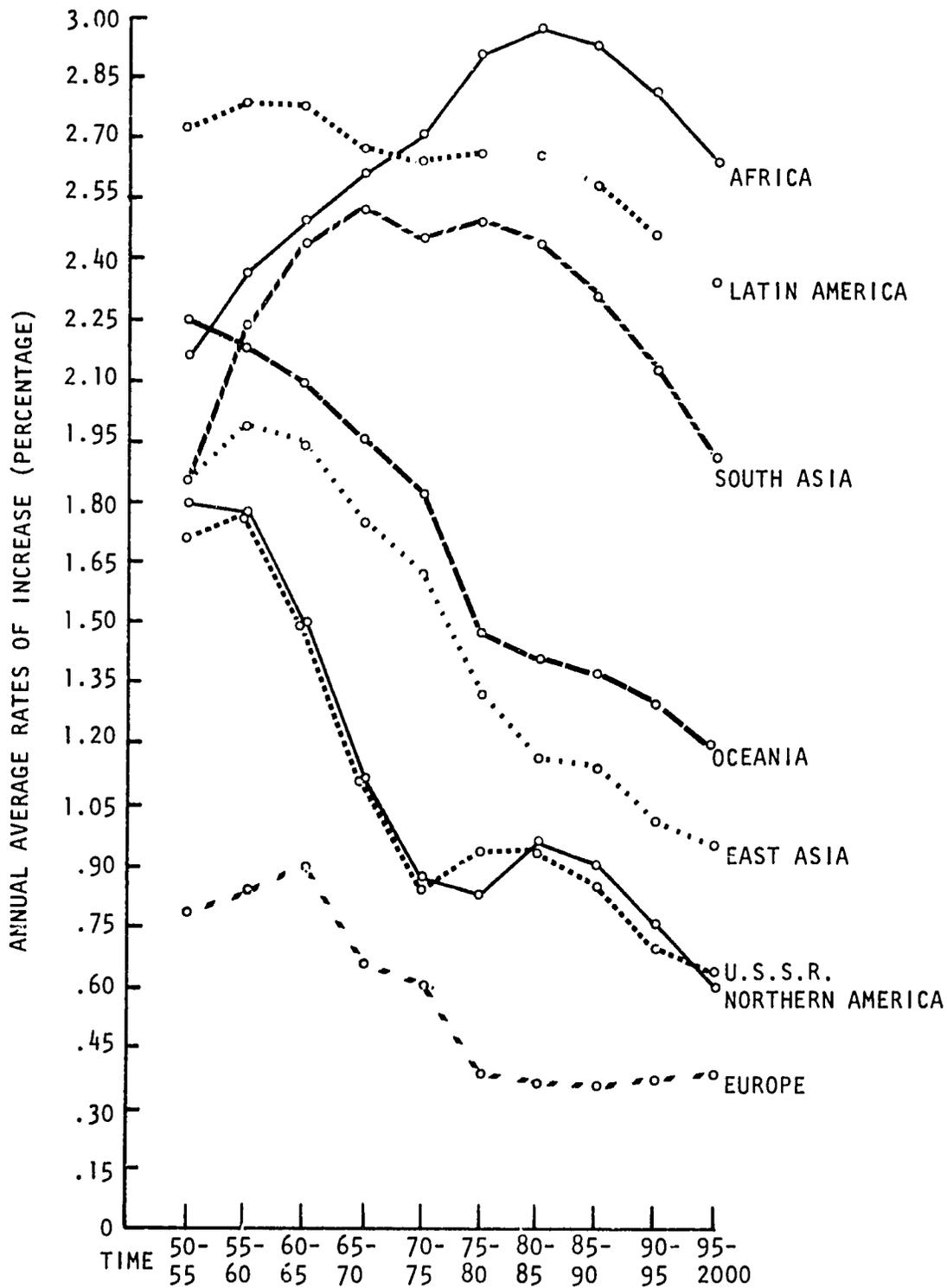
POPULATION GROWTH TRENDS IN THE WORLD,
MORE DEVELOPED AND LESS DEVELOPED REGIONS, 1950-2000



SOURCE: UNITED NATIONS, WORLD POPULATION TRENDS AND PROSPECTS BY COUNTRY, 1950-2000, SUMMARY REPORT OF THE 1978 ASSESSMENT (NEW YORK, ST/ESA/SER. R/33, 1979) VARIOUS PAGES.

Figure 3

POPULATION GROWTH TRENDS IN
EIGHT MAJOR AREAS OF THE WORLD, 1950-2000



SOURCE: UNITED NATIONS, WORLD POPULATION TRENDS AND PROSPECTS BY COUNTRY, 1950-2000, SUMMARY REPORT OF THE 1978 ASSESSMENT (NEW YORK, ST/ESA/SER. R/33, 1979) VARIOUS PAGES.

increase in 25 years. By the second half of the next century, world population could grow as high as 10 or perhaps 12 billion before a more or less stationary population level is achieved.* In the short to medium-term, therefore, even though population growth rates are declining, the absolute size of the new additions to world population will still be increasing in some regions.

For this reason, there will continue to be sharp population pressures on selected developing countries, most notably most of the low income countries that have yet to complete the demographic transition, and also in many lower and even upper middle income countries such as Mexico, where the decline in population growth has only recently occurred. In these countries, significant economic growth and investment will be required just to maintain existing levels of per capita income.

Because earlier birth rates were so high, many countries will be experiencing rapid labor force growth through the end of the century--even in those countries that have experienced birth rate declines. (See Table 2.) Since the labor force within most developing countries will increase more rapidly than population growth as a whole, perhaps the greatest challenge, in policy terms, will be to create sufficient job growth.

More generally, although the world as a whole does not face resource and food shortages of Malthusian proportions, rapid population growth

*The 10 billion figure is the central projection of previous Hudson Institute studies. See especially Kahn, et. al., op. cit., pp. 25-34. The 12 billion figure is the population size projected as most likely by the OECD study, Interfutures, Facing the Future: Mastering the Probable and Managing the Unpredictable (Paris: Organisation for Economic Co-operation and Development, 1979).

Table 2LABOR FORCE CHANGES IN MAJOR COUNTRY GROUPS: 1960-1980

	<u>PERCENTAGE OF LABOR FORCE IN</u>						<u>AVERAGE ANNUAL GROWTH OF LABOR FORCE</u>		
	<u>AGRICULTURE</u>		<u>INDUSTRY</u>		<u>SERVICES</u>		<u>(PERCENT)</u>		
	1960	1980	1960	1980	1960	1980	1960-1970	1970-1981	1981-2000
Low Income Economies	77	70	9	15	14	15	1.7	1.9	2.0
Middle Income Economies	62	45	15	21	23	34	2.1	2.3	2.7
Upper Middle-Income Economies	49	30	20	28	31	42	2.3	2.0	2.6
Industrial Market Economies	18	6	38	38	44	56	1.2	1.2	0.7

SOURCE: World Development Report, 1983.

in certain regions and countries will force policy makers to face difficult and often critical choices that will influence the well being of their constituents for many years to come.

One key implication of this overview of demographic trends is that a large and sometimes increasing differential in per capita income levels will continue between advanced and developing countries, among different developing countries, and within specific countries even as the demographic transition to a more or less stable world population level is taking place. These differentials in per capita income will be intensified in the short run by the effects of the debt crisis of recent years and in the medium-term by the large overhang in the labor force in developing countries. Debt servicing problems will restrain aggregate growth for at least 3-5 years in heavily debt burdened countries. The overhang of unemployed or underemployed people will depress real wage growth even in the more advanced sectors of the countries that do well. The political and economic burden of dealing with this relatively young, urban and literate bulge of unemployed will be considerable in all developing countries.

Within many developing countries the interactions between population and labor force growth, on the one hand, and the incentive to improve one's standard of living, on the other hand, have led to considerable rural-urban migration. To a large extent this migration is an unavoidable, even desirable aspect of economic progress.* However the burden

*As labor-productivity improves in agriculture, and higher productivity jobs become available in other sectors of the economy, usually in urban industrial areas, it is highly desirable for labor to migrate. Individuals and the country both gain.

on social and physical infrastructure is also considerable. The need in any case to create jobs for prospective new entrants to the labor forces means that policies have to strike a balance between the agricultural and other sectors to try to keep rural-urban migration from intensifying the problems of urban unemployment. People have to be encouraged to stay on the farm, without at the same time creating such large subsidies to farming that they lower the standard of living of the rest of the population.

B. Trade and Global Economic Interdependence

By almost any measure, global economic interdependence is significantly greater in the early 1980s than even ten years ago. Ratios of exports and imports to GNP and production in the major industrial countries illustrate this point clearly (see Table 3). From 1960 to 1980, the share of international activity increased dramatically in virtually all countries.* Other important aspects of interdependence, e.g., in services, in money markets, and in the flows of capital and labor, have all been growing substantially over time. Global markets developed for many goods, where previously these had been traded regionally or in colonial or neo-colonial blocs. Obvious examples include oil and many other mineral and agricultural products, autos, steel, chemicals, industrial and agricultural equipment, industrial and commercial construction, banking, transport, and pharmaceuticals.** The Eurocurrency

* Although there has been some decline in this ratio for certain countries between 1980 and the latest figure reported during the recession, this is unlikely to be a permanent phenomenon.

** The importance of the globalization of markets and some implications this has for international trade and corporate behavior are discussed in Theodore Levitt, "The Globalization of Markets," HBS83-24, Harvard Business School Working Paper.

Table 3

RATIOS OF EXPORTS AND IMPORTS TO GNP AND PRODUCTION^a

	<u>U.S.</u>	<u>FRANCE</u>	<u>F.R.</u> <u>GERMANY</u>	<u>ITALY</u>	<u>NETHERLANDS</u>	<u>UNITED</u> <u>KINGDOM</u>	<u>JAPAN</u>	<u>CANADA</u>
RATIO OF EXPORTS TO GNP								
1960	4.0	10.3	15.9	10.5	35.8	14.4	9.4	14.1
1970	4.3	12.8	18.5	14.2	37.0	15.8	9.5	19.6
1980	8.2	17.6	23.6	19.7	43.9	20.9	12.5	25.7
LATEST	6.7	17.8 ^d	26.7 ^d	21.3 ^d	48.4 ^d	20.1 ^d	13.0 ^d	23.7 ^d
RATIO OF EXPORTS TO PRODUCTION OF GOODS								
1960	11.5	23.4	32.5	27.6	(e)	38.5	18.8	42.9
1970	14.3	30.6	43.3	41.8	(e)	50.4	22.1	70.5
1980	28.7	56.8	65.6	54.9	(e)	71.6	36.1	87.6
LATEST	24.9 ^d	59.6 ^d	75.9 ^d	63.9 ^c	(e)	72.9 ^c	36.1 ^b	89.8 ^c
RATIO OF IMPORTS TO GNP								
1960	3.0	11.2	14.1	13.6	40.3	17.6	10.4	14.3
1970	4.3	13.5	16.1	16.1	42.2	17.7	9.2	16.3
1980	9.8	20.5	23.0	25.2	46.3	22.0	13.6	23.4
LATEST	8.3 ^d	21.3 ^d	23.5 ^d	24.9 ^d	47.0 ^d	20.6 ^d	12.4 ^d	19.0 ^d
RATIO OF IMPORTS TO PRODUCTION OF GOODS								
1960	8.5	21.4	28.8	35.7	(e)	47.3	20.8	43.8
1970	14.4	32.6	37.9	47.4	(e)	56.5	21.6	58.4
1980	34.1	66.2	63.9	70.4	(e)	75.5	39.3	79.7
LATEST	30.7 ^d	71.5 ^d	66.8 ^d	77.0 ^c	(e)	72.4 ^c	39.3 ^b	85.0 ^c

^aEXPORTS F.O.B., EXCEPT U.S. F.A.S., IMPORTS C.I.F., EXCEPT CANADA F.A.S.

^b1980

^c1981

^d1982

^eNOT AVAILABLE

SOURCE: U.S. DEPARTMENT OF COMMERCE, INTERNATIONAL ECONOMIC INDICATORS, (DECEMBER 1978), PP. 60-61, (MARCH 1980), PP. 36-37, AND (DECEMBER 1983), PP. 36-37.

market now exceeds the size of the U.S. money supply, up from virtually zero in the early 1970s.* New issues in the Eurobond market in 1982 exceeded new issues in the U.S.

This growth in economic interdependence has important implications that carry both benefits and costs for individual countries and for the international system as a whole. The benefits of interdependence tend to be underrated in times of turbulence. Goods are available to domestic purchasers at lower costs and sometimes when they would otherwise not be available at all. Domestic resources and skills can be used by producers more intensively and thus at lower cost because the worldwide market allows firms to expand to a more efficient size. Inflation is moderated when nascent production bottlenecks attract imports from abroad, rather than raise domestic prices.

Many of the costs of interdependence are a mirror-image of the benefits. As an economy becomes increasingly linked to the rest of the world, it also becomes more vulnerable to events that occur outside its domestic political control--i.e., inflation, resource supply embargoes, production gluts, lending restraints, and technological changes, among others. By the same token, domestic economic policy cannot isolate itself from foreign conditions and policies. For example, a declining dollar in the 1970s made U.S. inflation more difficult to control. Similarly, high U.S. interest rates in the early 1980s made it difficult

* In December 1982, U.S. money supply totaled \$478 billion on an M1 basis and \$1,960 billion on an M2 basis, while the Eurocurrency market totaled \$2,050 billion on a gross basis and \$960 billion on a net basis. This data are from U.S. Federal Reserve Bulletin (October 1983) and Morgan Guaranty Trust Company, World Financial Markets (September 1983).

for other countries to pursue stimulative policies. Changes in international conditions can impose severe domestic adjustment costs--e.g., when changes in international competition contribute to rapid declines in employment and production in selected domestic industries.

The actual and perceived costs and benefits of interdependence vary greatly among countries. European countries have always been more sensitive than the U.S. to economic interaction with neighboring countries. Because the U.S. has always had a much lower degree of interdependence than the European countries, its perception of the degree to which it has become more interdependent has probably been weaker than the actual degree of interdependence that in fact existed. Indeed, a widely held view of interdependence is that U.S. actions have much greater effects on other countries than their actions do on the U.S.

Developing countries have experienced a comparable increase in interdependence to that experienced by developed nations. Developing countries have always been important to the advanced countries as sources of supply for raw materials and as markets for manufactured goods. This greater interdependence contributed to a more speculative peak in commodity prices in the early 1970s, and to a correspondingly sharp decline in the subsequent recession. Meanwhile, import growth by the developing countries, supported by new access to international financial markets, facilitated continuity in purchases of manufactured goods, and helped soften the impact of the 1974-1975 global recession. By now, roughly one-third of the exports of an average OECD country go to developing countries--41 percent of U.S. exports in 1982 (10.4 percent to oil exporting countries

and 30.5 percent to non-oil developing countries).^{*} Indeed, given their new importance as trading partners, the economic health of developing countries can have a significant impact on that of the industrial countries. A Morgan Guaranty simulation of this sensitivity suggested that a uniform cutback in developing country growth of 3 percent would reduce real GNP for the OECD countries by 0.8 percent and the current account balance by \$15 billion (see Table 4). This particular calculation is based mostly on trade-flow interactions, and underestimates financial linkages, which would magnify the decline still further and the indirect effects of technology flows, competitive pressures, and attitudinal changes.^{**} In a word, greater economic interdependence implies a fundamental change in the role of developing countries in the world economy. Historically, the direction of causality was one way--in which the growth of the advanced countries was critical to growth in the developing countries; now causality works both ways.

Goods or services that are traded internationally tend to be in the most dynamic and efficient sectors of the exporting countries. Such products are either nonexistent or less efficiently produced in the importing countries. Under "normal" assumptions, i.e., in the absence of "shocks" or major trade policy conflicts, and given the short and medium term overall prospects discussed below, international trade will continue to expand more rapidly than output. This suggests

^{*} International Monetary Fund, Direction of Trade (March 1983).

^{**} These estimates are consistent with many other modelling effects, and reflect the now extremely high degree to which conditions in either group of countries can strongly affect the other with only short lags. The magnitude of the different impacts remains asymmetrical with the impact of the advanced countries still greater on the developing countries than the reverse.

Table 4

IMPACT ON OECD OF A UNIFORM 3% CUTBACK
IN LDC REAL GNP GROWTH¹

	CHANGE IN REAL GNP (PERCENT, 1983)	CHANGE IN CURRENT ACCOUNT (U.S. \$BILLIONS, 1983)
OECD	-0.8 %	\$ -15
UNITED STATES	-0.5	- 5
JAPAN	-1.1	- 3
EUROPE	-0.8	- 7

¹ Assuming no compensating policy changes by industrial countries. If growth cutbacks are concentrated in Latin America, the adverse consequences are more severe for the United States, but less severe for Japan and Europe.

SOURCE: Morgan Guaranty Trust Company, World Financial Markets (June 1983), p. 7.

that, on average, the producers of goods or services entering international trade will continue to experience a higher rate of change and growth, on average, than producers with exclusively domestic sales. Even among the advanced industrial countries, where the large potential gains from trade due to catch up effects from the early postwar years have now diminished, further room for trade growth is concentrated in areas where continuing reductions in legal and institutional barriers to trade are under discussion; such discussion leads to real reductions in barriers to trade, prospects for trade growth would be even more positive. Such a reduction in trade barriers was a major objective behind the creation of the European Economic Community (EEC). The potential gains from trade between developing countries and developed countries, based on the very income gaps that separate them, are also considerable. Finally, there is great potential growth in trade among developing countries themselves, in response to diverse patterns of growth and industrialization that different countries are experiencing.*

This projection of growing interdependence also points, virtually by definition, to a continued loss of autonomy in economic policy making. This suggests, in turn, that mechanisms such as the now annual summit

* Short term trade growth projections can be found in many sources. See for example OECD, Economic Outlook, 34, op. cit. pp. 58-64 and Technical Annex, pp. 117-130. Longer term projections are provided in the World Development Report, 1983 with a focus on those trends most important to developing countries. For a detailed industry-by-industry focus for the advanced countries, see the projections used as backup for the study of structural change in OECD, Industry in Transition, (Paris: organisation for Economic Co-operation and Development, 1983), especially parts IV and V.

meetings of the seven major OECD countries and other international consultative institutions like the OECD itself, the IMF, and the World Bank will become increasingly important as a means of bringing some policy, if not economic, rationalization to the cross-border forces that will be at work in any case. Whatever degree of formal coordination of policies takes place--and so far the record, e.g., on macroeconomic policies, has been mixed at best--there would almost certainly be even more informal exchanges among policy makers as their respective domestic policies are being formulated. Such informal communication may well be virtually the only effective means of ameliorating tensions between the rigorous market-based standards of a free-trade oriented international economic system and the implicitly political demands of a welfare state, one of whose basic purposes is to insulate people and institutions from the vagaries of the market. Issues such as standards, industrial policy, harmonization of regulations, etc., thus will remain high priority items for international negotiation for the foreseeable future.

Given the increased importance of the developing countries to the advanced countries and the broad commitment of the advanced countries to promoting and supporting economic development, several implications also emerge for U.S. policy. First, and of overwhelming importance, is the need to maintain reasonably open markets for developing country exports. Political pressures make this difficult at times, but natural constituencies for open markets do exist, even if they tend to be more diffuse than the constituencies favoring protectionism. In fact, developing country exports are a small share of advanced country markets, and most

such exports can expand substantially over time without major disruption to advanced country markets. Trade access by developing countries with significant manufacturing capabilities is more important than almost any other policy that an advanced industrial country can take toward developing countries. Policymakers in developed countries should of course still encourage developing countries to become more liberal in their own import policies as they become wealthier, i.e., U.S. policy might benefit by linking G.S.P. benefits not only to per capita income levels, as is now done, but also to the structure of a country's import policies. Indeed, not only does this help U.S. exports, but evidence also suggests that "outward-oriented" middle income countries (such as South Korea, Ivory Coast, Uruguay, Chile, and Thailand, among others), which maintained production incentives that were neutral between domestic and exported products, adjusted to the 1974-1978 period much more easily than "inward-oriented" countries (such as Argentina, Israel, Mexico, Morocco, Portugal, and Zambia, among others), which maintained incentives biased toward the production of domestic goods. This was in spite of the greater losses, relative to GNP, experienced by the outward-oriented countries. Thus, encouraging outward-oriented policies and liberal import policies is beneficial to both developing and developed countries.*

At the same time, policies toward financial relations with debtor countries and the banks and other institutions to which this debt is owed, must tread a careful path between excess stringency, which prevents credit worthy firms and countries from gaining appropriate funds, and excessive leniency, which encourages lack of adjustment on the part of

*See Mitra, op. cit., World Bank Staff Working Paper No. 472 (1981).

both countries and banks. Either can have very negative consequences for the U.S. and the world. Responses to debt problems are discussed in detail in Section E below.

Finally, U.S. efforts can have a high payoff through programs that transfer management skills and training, especially those that exposed developing country planners to ways of taking advantage of the world economy. Since many of these lessons emphasize the importance of market-oriented practices, attempts to link official development assistance programs more closely with private sector initiatives if properly designed are well-founded.

C. Energy Prospects

The real price of oil is now more than four times that of January 1973, and, under almost any conditions, can be expected to remain at no less than double or triple the January 1973 level indefinitely. High real energy prices have stimulated extensive new investments as countries seek to reduce imports or raise exports, and as energy-intensive industries relocate closer to sources of supply. Simultaneously, high real energy prices have reduced the economic viability of much existing capital. Some nations have grown more rapidly because of their proximity to major energy exporters or because of their particular ability to trade with energy producers. Others have experienced significantly slower economic growth because of the need to use scarce resources to pay for energy imports or because of trade relations with other nations that were negatively affected by higher energy prices. These patterns were accentuated with the new peak of energy prices in 1981, but have since been eased somewhat by the world oil price declines of the past two to three years.

A consensus projection among economists suggests that there will be no dramatic change in energy prices, relative to the general price level, for the next several years; energy prices may fall somewhat from present levels, but can be expected to begin to rise again around the end of the decade as demand presses on productive capacity (see Table 5). This consensus also foresees that energy prices will subsequently rise more rapidly than the general rate of inflation for decades to come. A June 1983 survey reported an average prediction of the world crude oil price for the year 2010 that implies a 4 percent annual rate of growth above inflation from 1983 levels.* This consensus is based on the notion that costs of production will increase rapidly, the most prolific sources of supply will become exhausted, and known resources will become depleted; thus, energy availability will not keep pace with the demands of economic growth without substantial price appreciation.

Energy price forecasts developed at Hudson Institute have differed from consensus forecasts for many years. Forecasts at Hudson have sought to recognize the above-mentioned factors influencing consensus views, as well as the adverse effects of regulation, taxation, political instability, or supply shortages, but also to emphasize the significant effects that reactions to previous price increases can have in succeeding periods. Essentially, Hudson's expectations have been that world energy prices for the rest of the century will rise at about the same rate

* Alan S. Manne and Leo Strattenholzer, International Energy Workshop: A Summary of the 1983 Poll Responses (Laxenburg, Austria: International Institute of Applied Systems Analysis, June 1983).

Table 5

CONSENSUS OIL PRICE FORECAST

<u>CURRENT DOLLARS</u>		
<u>YEAR</u>	<u>CRUDE PRICE (U.S.-F.O.B.)</u>	<u>ANNUAL RATE OF CHANGE FROM PREVIOUS PERIOD</u>
1981	\$34.76 [*]	--
1982	32.75	-5.8%
1983	33.75	3.1
1984	35.75	5.9
1982	\$32.75	-5.8%
1983-87 ^{**}	37.15	5.6
1988-92 ^{**}	49.60	6.7
 <u>CONSTANT (1981) DOLLARS</u>		
1981	\$34.76	--
1982	30.78	-11.4%
1983	29.87	-3.0
1984	29.79	-0.3
1982	\$30.78	-11.4%
1983-87 ^{**}	29.08	-0.2
1988-92 ^{**}	29.56	0.3

* ACTUAL.

** AVERAGE.

NOTE: DEFLATED USING EGGERT CONSENSUS FORECASTS FOR GNP IMPLICIT PRICE DEFLATOR.

SOURCE: SURVEY OF 26 ECONOMISTS, REPORTED IN EGGERT ECONOMIC ENTERPRISES, INC., BLUE CHIP ECONOMIC INDICATORS (MAY 10, 1982), PP.3 AND 7, AND (JUNE 10, 1982), PP.2 AND 8.

as the general price level.* By implication, Hudson's expectations have been that energy prices will be perhaps 30-50 percent lower than the consensus forecasts at the end of the century. The reasoning, again, is based on reactions of the market to previous price levels. Conservation, for example, has succeeded in slowing the growth of energy consumption beyond most other expectations, and technologies for energy exploration and production have been improving enough to enable major new sources of supply to continue to be found. These developments ease the tightness of supply expected in consensus forecasts.

For example, because of low levels of drilling activity in the past, oil wells outside the U.S. are, on average, 100 times larger than those inside the U.S. There are potential new sources of supply in tar sands, oil shale, deep gas, biomass, and solar, some of which may become extremely important in the long-term future. The prospect for a more moderate long-term price projection than suggested in consensus views is also supported by the large-scale availability of fields already developed but not in use in Saudi Arabia, Iran, Iraq, and elsewhere. of energy projects in economic development. For example, a recent study by the World Bank proposed that investments in energy projects of \$130 billion annually are needed in developing countries, based on an estimate of 3 percent annual real growth in energy prices.** Without such a

* See William M. Brown and Herman Kahn, "Why OPEC is Vulnerable," Fortune, July 14, 1980, pp. 67-69; William M. Brown, "Can OPEC Survive the Glut," Fortune, November 30, 1981; and Herman Kahn, The Coming Boom (New York: Simon & Schuster, 1982), Chapter 7.

** World Bank, The Energy Transition in Developing Countries, Washington, D.C., 1983. This forecast is similar to the International Energy Workshop forecast cited above. See also Joseph Barnea and William Epstein, "The World Bank's Grandiose Energy Plan for Developing Nations," Wall Street Journal, August 11, 1983, p. 20.

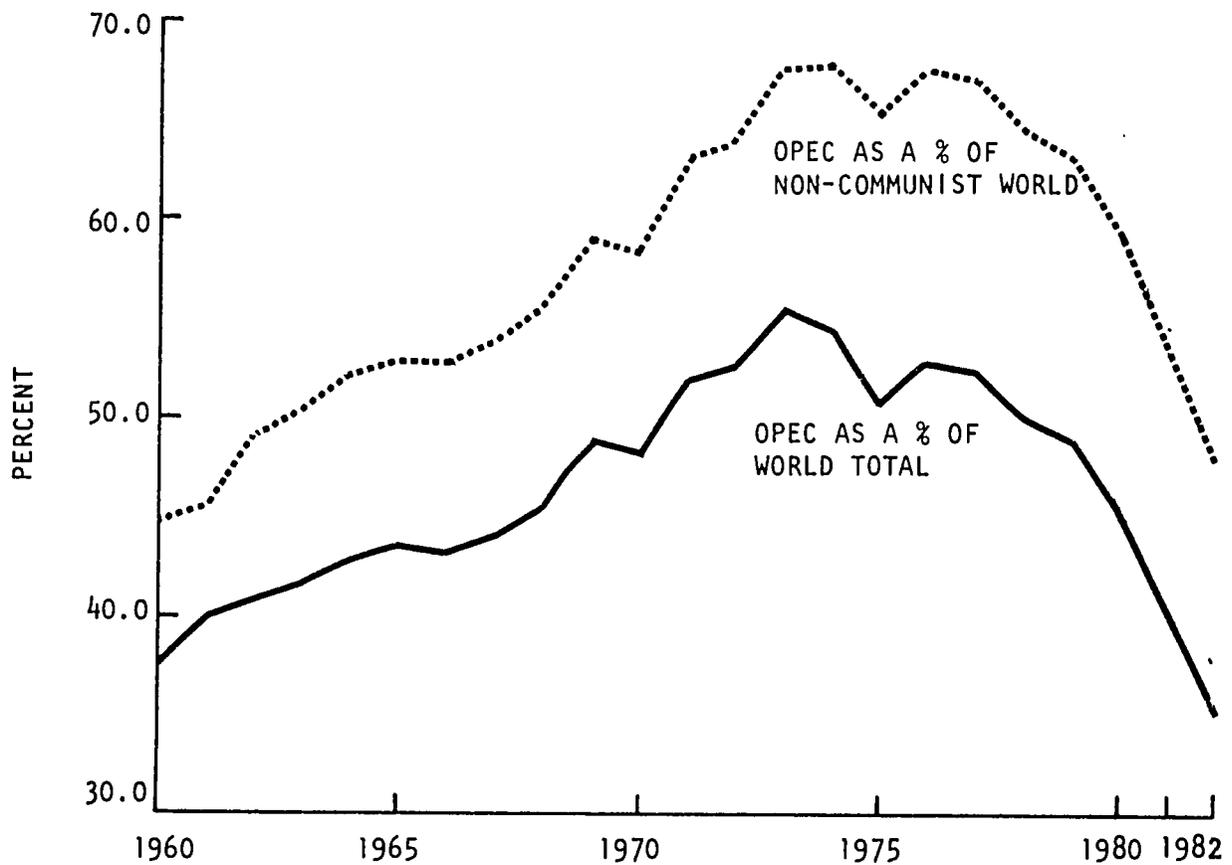
high energy price projection, many of the proposed investments cannot be justified.* This is evident, for example, in recent cutbacks in private energy investment as a result of the 1981-83 price decline. While energy investment will be lower, the share of investment in downstream facilities, relative to exploration and production, can be far higher. Thus, a lower energy price projection would put more emphasis on refining and petrochemicals, as well as imply reduced investment in energy production facilities.

The sensitivity of energy prices to political and military developments, in addition to economic fluctuations, could result in unstable energy prices irrespective of a long-term energy price trend per se. This adds to an already uncertain climate, and makes it difficult to plan projects and revenue. Over periods of 3-5 years, these fluctuations may be far more significant than the underlying trend. Hudson forecasts expect continued fluctuations and uncertainty about the general energy outlook. The importance of these fluctuations will be tempered, however. While much of the discussion, at least in the U.S., has concerned energy independence, the world market will continue to dominate domestic price movements except in those few countries willing to exert great controls over imports and domestic prices. The single most important trend affecting energy prices worldwide is that sources of supply have been greatly diversified, relative to the pre-1973 years. The share of OPEC in world production has been cut in half from 1973 to 1982, from two-thirds to one-third (see Figure 4). While prices remain sensitive to major political and military events, they have become less sensitive than before because

*Of course, with lower prices the quantity of energy used can be significantly greater.

Figure 4

OPEC CRUDE OIL PRODUCTION AS A
PERCENT OF WORLD PRODUCTION, 1960-1982
(THOUSANDS OF BARRELS PER DAY)



SOURCE: AMERICAN PETROLEUM INSTITUTE, BASIC PETROLEUM DATA BOOK: PETROLEUM INDUSTRY STATISTICS, VOL. 11, NO. 3 (WASHINGTON, D.C.: 1982); U.S. ENERGY INFORMATION ADMINISTRATION.

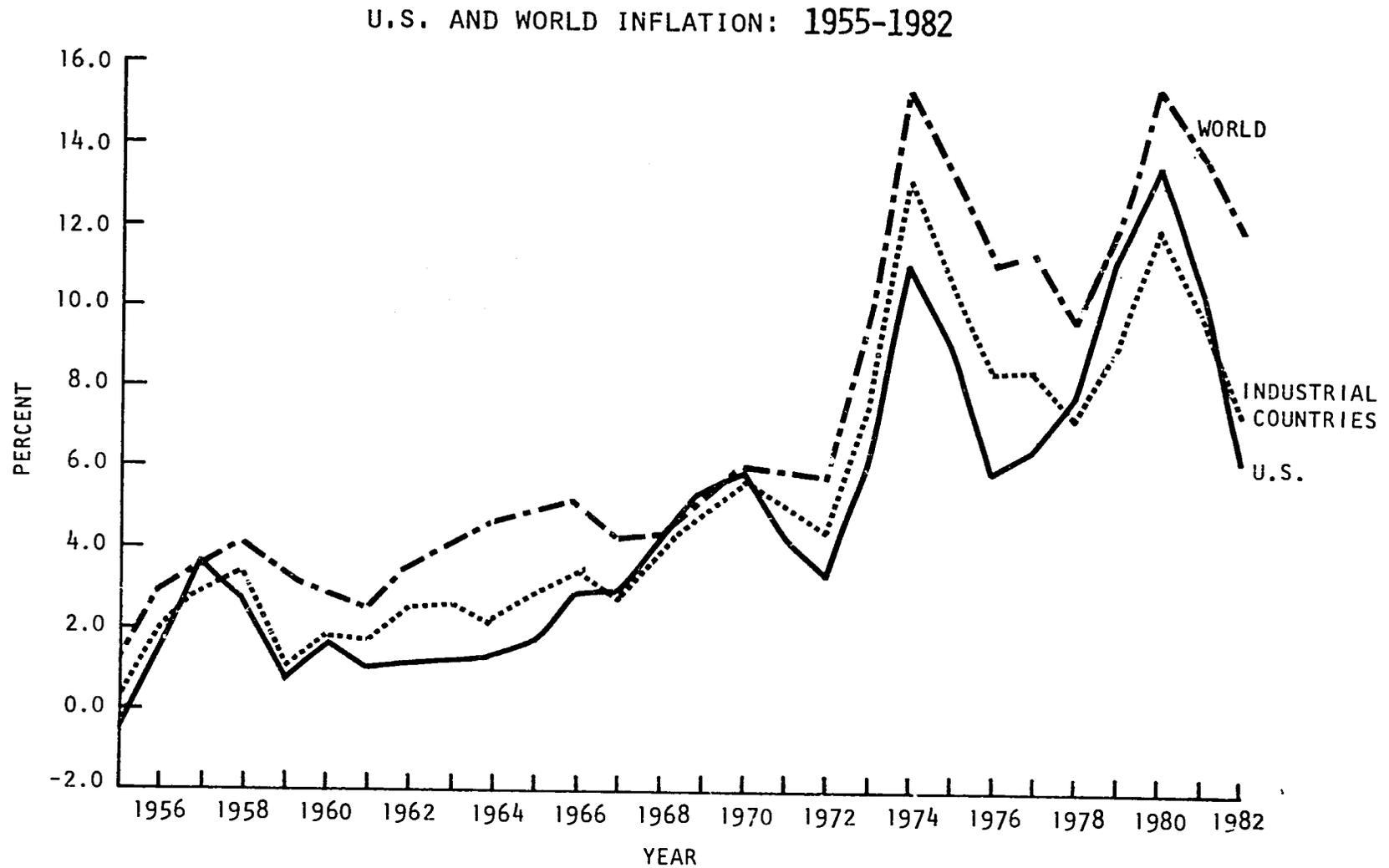
of this diversification and because the excess capacity built up in the false expectation of continually rising prices will take a long time to work itself off. As a result, while energy will continue to be more important in economic performance and policy-making than before 1973, it will not become increasingly important over time. Energy will only be one of a number of major considerations that shape the economic future. Perhaps the major implication for U.S. policy is not to overemphasize energy investments. Massive energy-related investments are needed in many countries, but they need to be designed for an environment of high and somewhat uncertain, though not rising, energy prices (in real terms).

D. Inflation Prospects

World inflation rose continually in a series of upward moves, from the mid-1950s to the late-1970s (see Figure 5). While several European nations made serious attempts to reduce inflation in the mid-1970s, their success was constrained by limited U.S. cooperation. Then, when the U.S. changed its monetary policies in 1979, a quarter-century of rising inflation rates was dramatically reversed. However, as with energy, a consensus of forecasts failed to foresee this shift. Many countries had taken on extensive debt burdens in order to defer adjustment to new conditions, to ease the transition to these conditions, and to bet that increased inflation would bail them out.* With the disinflation of the 1980s came the most severe worldwide recession since the 1930s, marked

* A large part of the debt growth was an involuntary response to unexpected shortfalls in export demand in order to maintain key imports. Nevertheless the tremendous incentive to borrow when high inflation led to negative real interest rates during the mid-1970s greatly expanded debt.

Figure 5



SOURCE: INTERNATIONAL MONETARY FUND, INTERNATIONAL FINANCIAL STATISTICS, VARIOUS ISSUES, AND ECONOMIC REPORT OF THE PRESIDENT, JANUARY, 1982.

by sharp declines in commodity prices, a reversal of the oil price spiral, and the international debt crisis.

Although inflation has declined dramatically, in most countries it remains considerably higher than it did a quarter of a century ago. The risk remains that at some point during this decade or the next inflation will return to its previous high levels, or else will fluctuate widely, leading in turn to corresponding increases or fluctuations in interest rates and to weakened or erratic economic performance. Indeed, continued concern about future increases in inflation are an important reason why real interest rates (the difference between nominal interest rates and the rate of inflation) remain at unprecedentedly high levels.

High real interest rates reflect a concern that inflation is at a cyclical low and will rise again with economic recovery. They also reflect concern that monetary restraint will be relaxed to finance large budget deficits.

In an age in which monetary policies that reflect the views of Milton Friedman are more influential than the demand stimulation policies that reflect the views of John Maynard Keynes, the economies of the advanced countries may well succeed in maintaining an ability to keep inflation in check, reversing a nearly 30-year postwar trend. Nevertheless, after the traumatic inflation experiences of the 1970s, expectations are of renewed inflation likely to linger resulting in a continued so-called inflation premium that lenders will expect as part of the interest rate they receive for making funds available for use by borrowers. Thus, high real interest rates the rate offer adjustment for inflation--will

continue to exert a drag on economic growth, as well as remaining a source of vulnerability in the face of other shocks.

Moreover, the longer-term question remains whether, an Age of Friedman can be as long-lasting as the Age of Keynes. The long-term trends in advanced industrial countries to seek to reduce risk with rising affluence suggests that the current Age of Friedman cannot last more than 10-20 years, or much beyond the end of the century. Thus, long-term projections have to allow for the possibility that, shortly before or shortly after the turn of the century, high rates of inflation may return. This affects planning for long lead time projects, and to some extent shows up even now in the inflation premium built into current real interest rates.

To be sure, financial markets have been making major adjustments to the requirements of a more inflationary environment than existed before 1973. The first wave of financial market adjustments was toward variable interest rates and shorter-term loans. These proved to be highly vulnerable to interest-rate shocks, with adverse effects on borrowers and an added risk of default for lenders. (As noted in Section E below, excessive reliance on short-term borrowing and the high debt service burdens of floating rate loans at a time when interest rates failed to decline in spite of a global recession and a decline in export prices represented major difficulties for many developing countries.) Subsequently, the U.S. financial system has increased its use of asset-based financing and internal and equity-based financing, and internal and equity-based financing is increasing in Japan, relative to the postwar dominance of bank lending as the principal source of corporate finance. Still newer instruments and methods to deal with inflationary expectations, such as indexed bonds (where the inflation premium is converted to a return

on principal, rather than front-loaded into an excessively burdensome interest rate), will need to be developed, especially for longer term investment projects.

The existing tax policies of many nations make them particularly vulnerable to the effects of high, rising, and fluctuating inflation, and these, too, need revision of the adverse effects of continued inflationary expectations on economic growth are to be minimized. In the example mentioned above, the taxation of inflation premiums as ordinary income, when they logically represent a return of principal designed to maintain a purchasing power of the lender), is another contributing factor to high real interest rates in the U.S. simply because of the way the tax system works, lenders have no choice but to require a much larger pre-tax rate of return in order to obtain an adequate real return after taking account of both inflation and taxes. This essentially obsolete method of taxing inflation operates adversely in other ways as well. Most countries' tax systems have made few changes to insulate their economies from possible inflation shocks; this leads to large unlegislated and hidden tax increases on savings and investment. The most effective means of dealing with these vulnerabilities is the reduction of inflation itself, but without more significant revisions to tax systems, the growth-stagnating effects of increased inflation could recur much more easily.

A global outlook in which the control of inflation to remains a high priority policy goal is a healthy development. Until this change from previous patterns is widely perceived as permanent, interest rates will continue to include a premium to account for inflationary expectations. Continued high real interest rates will place a considerable

burden on developing countries with large debt service requirements.* These high rates will exert continued pressure on developing countries to restrain imports, expand exports, and provide incentives for increased domestic savings. In the long run, these steps will have strengthened those developing countries that succeed in taking them, but the short run costs of such steps will in some cases be considerable.

E. Global Debt

At the end of 1982 the international financial system had accumulated developing country debt of approximately \$630 billion, and outstanding debt to Eastern Europe of about \$80 billion. Indicators of debt and debt burden for the major borrowers are presented in Table 6. This large-scale debt accumulation occurred at a time when an extremely deep recession made servicing this debt very difficult. By mid-1982, banks had become so frightened by debt crises in Mexico, Argentina, Brazil and elsewhere, that lending to developing countries generally contracted by half in the ensuing six months.** This sharp a contraction in lending, put financial strains even on countries that in "normal" times might have been able to service their debt.

The immediate liquidity problems of late 1982, which many feared at the time would trigger a general financial collapse,*** were dealt

* Perhaps the most appropriate measures of the real interest rate paid by developing countries is their international borrowing rate less the rate of growth in their export prices.

** According to Morgan Guaranty estimates, the end of 1982 brought roughly \$280 billion of commercial debt up for rescheduling. This compares to a the total amount of capital in the reserves of the world's 80 largest banks of only \$132 billion.

*** Time's cover story for January 10, 1983, was headlined, "The Debt Bomb."

Table 6

EXTERNAL DEBT, TOTAL AND SHORT-TERM IN RELATION TO TRADE
BILLIONS OF DOLLARS

	<u>TOTAL EXTERNAL DEBT</u>		<u>SHORT-TERM DEBT^b</u>	
	<u>END-1982</u>	<u>IN EXCESS OF 200% OF EXPORTS^a</u>	<u>END-1982</u>	<u>IN EXCESS OF 3-MOS. IMPORTS^c</u>
21 Major LDC Borrowers	514.5	97.8	132.5	87.4
Latin America	288.1	80.7	75.7	59.2
Argentina	38.8	18.0	7.3	6.1
Brazil	86.3	34.3	16.7	11.9
Chile	17.2	4.9	3.2	2.3
Colombia	10.2	0.0	1.3	2.0
Ecuador	6.6	0.9	1.3 ^d	0.7 ^d
Mexico	84.6	20.4	25.8 ^d	22.2 ^d
Peru	11.2	2.2	3.2	2.3
Venezuela	33.2	0.0	15.0	11.7
Asia	108.8	2.7	29.0	10.6
Indonesia	21.9	0.0	2.9	0.0
Korea	37.2	0.0	10.4	4.6
Malaysia	8.6	0.0	1.7	0.0
Philippines	20.7	2.7	7.8	5.8
Taiwan	9.3	0.0	4.0	0.0
Thailand	11.1	0.0	2.2	0.2
Middle East and Africa	117.6	14.4	27.8	17.6
Algeria	14.8	0.0	0.7	0.0
Egypt	21.8	3.3	3.2	1.2
Israel	28.0	4.1	13.5	12.3
Ivory Coast	8.4	2.1	2.0	1.5
Morocco	10.8	2.4	1.0	0.1
Nigeria	11.2	0.0	3.0	0.0
Turkey	22.6	2.5	4.4	2.5

^aBased on average 1982 debt level in relation to exports of goods and services.

^bOriginal maturity of one year or less.

^c1982 merchandise imports.

^dIncludes nearly \$10 billion of Mexican short-term debt that has now been restructured.

SOURCE: Morgan Guaranty Trust Company, World Financial Markets, June 1983.

with through the provision of short-term bridge financing, followed by IMF stabilization programs. Thus, the prospect of such a collapse is now generally considered unlikely. Current policy concerns are focused on ways to develop private and official financing that maintain a narrow line between encouraging conservative macroeconomic policies and balance of payment adjustments while at the same time providing sufficient additional funds for investment growth to occur.

The financial crisis of 1981-82 stemmed from several interrelated causes. The two oil price increases of 1973-74 and 1979-80 resulted in a huge accumulation of funds by oil-producing countries and a tremendous need for funds on the part of those developing countries dependent on imported oil. A recession in the industrial countries followed each oil price increase, resulting in lower demand for developing country exports. After the first oil price increase, developing countries had a strong incentive to borrow money as a way of paying for imported oil and capital goods; the alternative appeared to be massive development setbacks, out-and-out physical suffering, and concurrent political turbulence. Moreover, since the huge supply of petrodollars, coupled with the recession, had led to low demand for funds in the advanced countries, such funds were easily available--and made available by international banks engaged in so-called recycling operations.

Not surprisingly, this imbalance between supply and demand created a hyper-competitive lending environment in which real interest rates fell to negative values and lending conditions were considerably relaxed. The ability to borrow at negative real interest rates, however useful

at the time it began, subsequently created important vulnerabilities in borrower nations; some developing countries borrowed on the assumption that interest rates would remain low or moderate indefinitely, others simply on the assumption that the world economy would support their economic growth indefinitely and facilitate future repayment as a matter of course. In many cases, politically difficult adjustment programs were put off or ignored entirely. Some advanced country governments even encouraged such balance of payments lending for fear that a failure to recycle petrodollars might undermine global financial stability.

Between 1976 and 1980, inflation was the major factor raising the 90-day Eurodollar rate from a low of 5.01 percent in December 1976 to a high of 19.47 percent in December 1980; this increase in nominal interest rates added to debt servicing burdens in nominal terms. Then, with the imposition of tight money policies to control inflation combined with government deficits in various industrial countries--especially the U.S.--real interest rates increased dramatically as inflation declined. This raised debt service burdens enormously while the global recession lowered export earnings. As the recession became prolonged, the debt service burden for some developing countries became overwhelming.

Since the end of 1982, the U.S. Federal Reserve Board, the U.S. Currency Stabilization Fund, the Bank for International Settlements (BIS), and the IMF, among others, have cooperated to make crisis management procedures more effective. Yet, if major banks once again significantly contract their lending, especially to particularly important borrowers such as Mexico or Brazil, even these improved crisis management procedures could be overwhelmed. Governments might then be faced with a choice

between bailing out the system at the cost of severe inflation or allowing financial collapse and depression to occur. For this reason, the Federal Reserve and the IMF have continued to press banks to maintain their lending to developing countries.

Adjustment problems remain particularly severe among those countries, especially in Latin America and Africa, that have weak governments--or governments that act mainly in the interests of a selected elite group as against the interests of the economy as a whole. Even under a more or less optimistic scenario, 3-5 years will be required to work off the bulk of the adjustments needed by the heavily indebted countries. This is not a bleak picture, but it is one of constrained growth in the immediate future. Various factors will serve to reduce the risks of crisis, and help to restore growth among all developing countries notably: renewed growth among the advanced countries, continued growth among some middle income countries, further institutionalization of crisis management procedures, the already visible pick-up in commodity prices, an expansion of world trade, and the prospect of stable or declining energy prices. During this period two variables will dominate the speed of adjustment: continued access to finance and the ability to expand exports.

The international financial system must somehow proceed by weighing the risks that individual banks might be too exposed to foreign disruption against the risks of collapse of the whole system. Given the high exposure levels that have developed to date, the system does not have a great deal of flexibility in expanding new lending. This suggests that a larger share of future growth in lending, especially during the next several years, will have to come from official, and private non-bank, sources.

Despite the importance of continued funding, expansion of official U.S. contributions have become politically difficult--as evidenced most recently by the reduced replenishment funds for the International Development Association (IDA), which in turn was emulated by the other advanced countries. Proposals for more commercially-oriented loan programs may be received more sympathetically, but at least for the short term, U.S. sources of official finance will have only a limited growth. The only area with substantial potential for growth is that of private non-bank sources. Among these the biggest are insurance companies, pension funds, and trusts, which are typically conservative risk-averse investors but also willing to invest long-term. Many of these organizations began to diversify into foreign assets during the 1970s, though mainly in other advanced countries. Given the existence of new mechanisms to reduce risks that in turn would encourage participation in the uncertain but potentially high payoff activities that exist in developing countries, many of these organizations would doubtless be receptive to bonds, equities, and other forms of long-term investments. U.S. policy could encourage the creation of such new mechanisms as: private co-financing and/or equity participation in state-owned or supported projects; tax incentives to encourage private risk insurance programs; expansion of existing public risk insurance programs; and a national or multinational pooled loan market analogous to the domestic U.S. pooled mortgage market. Looking further ahead, the U.S. Securities and Exchange Commission, either by itself or in conjunction with similar bodies from other advanced countries, could work with developing countries to establish procedures that would in turn encourage equity investment in private sector projects in developing countries. Foreign acquisitions

of operating assets in many developing countries were greatly limited during the 1970s, partly by the depressed economic conditions of the day but also by the increase in instances of expropriation, nationalization, restrictions on profit repatriation, mandated export requirements, and price controls. Though many of these barriers still exist in some countries, the overall climate toward foreign investment in developing countries has improved markedly in others, e.g., Mexico and other Latin American countries. This does not mean that foreign ownership will be viewed in developing countries as an unequivocal gain, but that profitable deals can now be arranged more easily than in the preceding decade.

F. Technology Trends

An important cause of continued economic development is the ability of countries to make use of higher-level technologies as their domestic production capabilities increase. Handicraft industries are succeeded as growth sectors by light manufacturing and later by heavy manufacturing and electronics. With the accumulation of capital and experience, larger plants employing more sophisticated production techniques are gradually introduced, making higher quality and more sophisticated products. This succession of new capabilities and growth industries has perhaps been most dramatically illustrated by Japan as it moved from being a nation that produced cheap, low-quality merchandise in the immediate postwar period to its current status as the world's second largest market economy competing head-to-head with any other in many high technology products. Similar technological progress, at a less advanced stage in the process, can be seen in such Newly Industrializing Countries (NICs) as Brazil

and South Korea--both of which are now able to send engineers and technical staff to other developing countries. The process of moving up the technology ladder as economic growth proceeds can be expected to continue indefinitely, as middle-income developing countries move into more sophisticated applications and less-developed countries begin to follow the same path.

Technology has also spread among industries. Service industries--wholesale and retail trade, business and personal services, and finance--were once widely regarded as backward, but have now become major utilizers of technology. This is most evident in advanced countries in such areas as financial services, medical diagnostics, and information processing. With the ability to borrow from the experience of other nations, some developing countries now have the capability to move into higher technology services at much earlier stages of development than did the developed countries of today.

There are many unanswered questions regarding which technologies are most "appropriate" in developing countries. A decade ago the phrase "appropriate" technology was used to challenge the practice of building large plants with equipment not well-matched to the skills and initiative of local nationals. Today, new technologies are offering opportunities for decentralized decision-making to a far greater degree than government programs could ever have hoped to achieve. Thus, there is now much greater recognition of the uncertainties involved in trying consciously to design effective strategies that utilize sophisticated technologies earlier in the development process. To some extent, the market itself seems to be solving many of the problems of selecting "appropriate" technology.

Continuing progress in technology has led to a world market for new technology. Both developed and developing countries have benefited from the ability to borrow technology and experience from other nations. In order to "catch up" in technology development and to serve growing world markets in goods and services, many countries have invested heavily in their own technological development. The U.S. share of global spending on R&D has declined steadily as other nations have pursued technological opportunities. Indeed, the global economy is probably experiencing a new wave of technological development that is likely to last for decades. Recent developments in computers and telecommunications, building on such trends as the decline in the price of computer memories, have actually been in progress for many years. Their cumulative impact has now become great. Similar effects can be expected in biotechnologies, new materials, and other areas. These new technological developments will create many new opportunities, and transform industries as they are currently structured.

In the earliest stages, new technologies are likely to favor those countries that are making the most rapid progress in technological development itself. In other words, industries based on new technologies are likely to stay close to home during the early stages of their development. Only after products and production methods have become routinized are they likely to move offshore. As developing countries continue to move into higher technology industries and production methods, and as long as the wave of technological progress continues in the advanced countries, the developing countries should reap the benefits at earlier stages of product, process, and market development. In effect, technological progress itself is accelerating the spread of gains to from advanced to developing

countries. The process by which technologies spread have become so institutionalized that this spread will be even more rapid than in the wave of technological change that occurred in the 1950s.

As noted above, many of the new technologies, particularly those associated with computing power and communications, facilitate small producing units. This makes it easier for geographically dispersed operations to operate efficiently and by world, not local, standards. Thus, firms and industries can be extraordinarily footloose, producing much greater diversity of production methods, products, and organization. Because many specialized producing units can be linked together through communications, often the efficiency gains go to the overall system, rather than only the individual firms or production processes. This is a marked change from the older environment in which larger, highly centralized, capital-intensive facilities, such as steel mills, were looked upon as a source of economies-of-scale for economic progress.

Many industries are responding to this environment through the growth of networking--the extensive increase in interconnections and forms of cooperation among firms that may sell through each others' markets, jointly produce products, or coordinate other activities. Because of the growth of a world market in technology and the effects of the new technologies on industry, we see and expect to continue to see the rapid growth of licensing, co-production, sub-contracting, and other arrangements for communications and cooperation, linking diverse firms into new economic systems. The "world car" trend is only the leading edge of a much more diverse change in industry organization.

The new wave of technologies is also a major reason for the likelihood of continued intense competition in most industries in both the advanced and the developing countries. Competition has been intense for several years because cyclical factors led the world economy to a point of low capacity utilization; on the other hand, rigidities have finally begun to be shaken loose by powerful market forces for example, computer and communication technologies add pressures that completely circumvent previous boundaries between markets, institutional roles, and regulations. Because the effects of technology are felt much more rapidly than attempts to regulate their impact, a climate of intense competition, even after the current recovery, is likely to continue indefinitely.

For this reason, new technologies greatly intensify the problems of economic adjustment for countries and industries that have major adjustment costs in physical capital, technologies, human resources, and institutional arrangements keyed to dated production and distribution methods. In this climate of rapid technological change, flexibility in institutional, corporate, and government responses is extremely important. Adjustment, however painful, is far preferable in the long run to attempts to avoid adjustment. Countries or industries that take the latter course will generally lose far more than those that are prepared to take advantage of the benefits of new opportunities.

The development of technology is at the heart of the spread of economic development to date; at the same time, it will play an even more important role in the future. In an era when the kind of rapid demand growth associated with the postwar catch-up years of the 1950s and 1960s has passed and when major problems have arisen that require extensive

improvements on the supply side, a new wave of technologies will be particularly beneficial and effective. A more flexible economic climate can be expected to continue, and in turn allow these benefits to spread.

G. Structural Adjustment

It has long been recognized that economic development and the maturing of economies is accompanied by major shifts in industrial structure.* Considerable attention has focused on the shifts that have occurred within nations, from primary to secondary and tertiary industries, and the changes in comparative advantage that have emerged among nations as such shifts have occurred. Table 7 shows how the composition of output and employment within country groups has changed over time; Table 8 provides an indication of competitive changes by showing how shares of world exports of manufactures have changed over time in selected countries. Major shifts in industrial structure require extensive adjustments of labor and capital, with major social and political consequences. The costs of adjustment are often extremely painful--especially in periods of slow growth or recession.

In the enormous body of literature that has developed on the history and process of economic development, many ideas have been advanced to explain the way economic performance varies among countries, time periods, etc.** Despite disagreement among scholars about both proximate and fundamental causes of economic development, there is general agreement

* See, for example, the now-classic works by Colin Clark, The Conditions of Economic Progress, 4rd ed. (New York: St. Martin's Press, 1957); and Simon Kuznets, Modern Economic Growth: Rate, Structure, and Spread, (New Haven, Conn: Yale University Press, 1966).

** The nature of this literature varies widely, ranging from quantitative information and highly formalized models to qualitative observations and opinions about probable causes of development.

Table 7

STRUCTURE OF EMPLOYMENT AND PRODUCTION: 1960 AND 1980

	SHARE OF GROSS DOMESTIC PRODUCT (PERCENT)								SHARE OF LABOR FORCE (PERCENT)					
	AGRICULTURE		INDUSTRY		(MANUFACTURING) ^a		SERVICES		AGRICULTURE		INDUSTRY		SERVICES	
	1960	1980	1960	1980	1960	1980	1960	1980	1960	1980	1960	1980	1960	1980
LOW INCOME	50	36	18	35	12	15	32	29	77	71	10	15	14	15
MIDDLE INCOME	24	15	30	40	20	19	46	45	61	44	15	22	24	34
OIL EXPORTERS	28	14	24	43	13	16	48	43	65	47	13	21	22	32
OIL IMPORTERS	23	15	32	37	23	23	45	48	59	42	16	22	25	36
HIGH INCOME														
OIL EXPORTERS	n.a.	1	n.a.	77	n.a.	4	n.a.	22	63	46	13	19	24	35
INDUSTRIAL MARKET	6	4	40	37	30	27	34	62	18	6	38	38	44	56
U.S.	4	3	38	34	29	24	58	63	7	2	36	32	57	66
NON MARKET INDUSTRIAL	21	15	62	63	52	n.a.	17	22	41	16	31	45	28	39

^a MANUFACTURING IS PART OF THE INDUSTRIAL SECTOR, BUT IS SHOWN SEPARATELY BECAUSE IT TYPICALLY IS THE MOST DYNAMIC PART OF THE INDUSTRIAL SECTOR.

SOURCE: WORLD BANK, WORLD DEVELOPMENT REPORT, 1982, VARIOUS TABLES.

Table 8

GEOGRAPHICAL DISTRIBUTION OF WORLD EXPORTS
OF MANUFACTURES
(PERCENTAGES)

	1963	1976
CANADA	2.61%	3.32%
UNITED STATES	17.24	13.55
JAPAN	5.98	11.38
FRANCE	6.99	7.41
GERMANY	15.53	15.81
ITALY	4.73	5.49
UNITED KINGDOM	11.14	6.59
SPAIN	0.28	1.07
PORTUGAL	0.30	0.21
GREECE	0.04	0.22
OTHER OECD	15.65	17.71
TOTAL OECD	80.49	82.76
BRAZIL	0.05	0.41
MEXICO	0.17	0.51
YUGOSLAVIA	0.40	0.60
HONG KONG	0.76	1.15
KOREA	0.05	1.20
TAIWAN	0.16	1.23
SINGAPORE	0.38	0.52
(TOTAL NICs)	(2.59)	(7.12)
OTHER LDCs	2.70	1.55
EASTERN BLOC	13.35	9.65
WORLD TOTAL	100.00	100.00

SOURCE: GATT.

AS REPORTED IN OECD, THE IMPACT OF NEWLY INDUSTRIALIZING COUNTRIES ON PRODUCTION AND TRADE IN MANUFACTURES, REPORT BY THE SECRETARY GENERAL (1979).

that, as economies develop, they naturally tend to specialize in activities for which they are particularly well-suited--either because of the availability of physical and human resources or because of new capabilities for higher productivity.* In this sense, economic development is a continuing process, involving continuing shifts in economic activities and their organization.

In the period of rapid economic growth that characterized most of the world from the late 1940s to the early 1970s, there was little organized resistance to the industrial structure shifts that were occurring at the time. Since most of the countries of the world were experiencing rapid growth, the costs of adjustment, in terms of manpower and capital dislocation were, by and large, neither overly burdensome nor perceived as overly burdensome.

Since the decline of average growth rates after 1973, many countries have paid at least nominal attention to the need for industrial structure shifts in the face of major economic changes--as illustrated by the basic principle of "positive adjustment policies" agreed upon by the OECD Council of Ministers. But in the face of weak world economic performance and shifts in comparative advantage among advanced industrial countries and between them and the NICs, many advanced countries, particularly in Western Europe, have appeared increasingly unwilling to bear the costs associated with industrial structure shifts--e.g., unemployment, the need for retraining workers, and the termination or contraction of certain traditional industries.

*The latter change is made possible by the application of increasing amounts of capital and technology, leading in turn to productivity improvements and to an economy that is in turn able to undertake many new activities in addition to, and in some cases instead of, earlier activities.

Most OECD countries face serious and probably permanent declines in various basic manufacturing industries, such as steel, autos, shipbuilding, and petro-chemicals, to name a few.

In this environment, there have been strong reactions against structural changes that might previously have seemed, in theory at least, to be inevitable. Strong social and political pressures in many of the advanced industrial countries have sought to alleviate the social consequences of structural change by preserving existing employment and production structures. With the intensified pressures on a number of basic manufacturing industries, reflecting fundamental changes in both domestic conditions and in comparative advantage, efforts to delay or otherwise halt the adjustment process have also resulted in pressures for protectionist solutions. Even in the U.S., the most open of the advanced countries in the postwar period, these pressures have now produced pending legislation, such as "local content" and "reciprocity" bills, that threaten to undermine the basic principles of the generalized, non-discriminating international trading system set up after World War II.

The extensive global structural changes that have occurred since the early 1970s include many dimensions besides changing comparative advantage. As noted above, the growth rate of world population began to experience sustained declines. More importantly, the slowdown in economic growth that has occurred since 1974 probably reflected not only a secular decline in demand-based factors stemming from a catch-up period after the war, but also a "structural change" in social attitudes toward a weakened desire for further growth among the advanced countries. Various

social reactions to growth became obvious when long-term increases in the size and role of governments also became more visible. This growth in government spending reflected trends that Kahn referred to as "the New Emphases," meaning an attempt by people and national policies to seek greater health, safety, job security, and other forms of risk-avoidance as they became more affluent. This behavior led to large budget deficits on a worldwide scale, and in the U.S. to highly restrictive environmental and other forms of regulation even at late stages in the high-growth era, when fiscal limitations had already begun to be felt.*

As discussed above, as productivity growth started to slow down after the mid-1960s, GNP growth in some countries was artificially propped up by economic stimulation--making those countries particularly vulnerable to abrupt declines when faced with economic shocks such as energy price increases. The end of the long period of rapid economic growth that occurred in the early 1970s was also associated with an exhaustion, at least temporarily, of opportunities to shift from mechanical to electrical technologies and with a saturation of new products that excited consumer demand.** Growth became increasingly dependent on doing more of the same, and, to some extent, doing it on a larger scale to achieve economies-of-scale in mass production and distribution. Developing countries became especially prone to make investments based on a continuation, not only of high rates of growth, but also of growth from the same sources in

* The growth of government is now being held in check in many advanced nations by high levels of debt and by public resistance to tax increases.

** The shift from electrical to electronic and information-based technologies, which forms a major part of the technological innovations taking place now (see Section F above) had not yet become widespread enough to stimulate the investment needed to offset the declines mentioned here.

the same industries and products. As a result, they became particularly vulnerable to shifts in the rate of growth and the nature of markets, since new technologies and products were not replacing maturing technologies on a large scale.

The degree to which subsequent adjustments to changed conditions have occurred varies enormously from country to country. High inflation and efforts to control its effects seriously complicated the adjustment process. In general, among the advanced countries, the U.S. and Japan have been more willing to make market-based adjustments, through extensive cost-cutting and commitments to new industries, than the countries of Western Europe. By and large, adjustments in Europe have tended to be later and slower, and less likely to make the kind of contributions to a positive external environment for developing country growth than they have had in the past. Some developing nations have demonstrated an ability to maintain high rates of economic growth despite adverse external conditions, even though 1982 was the worst recession year in post-World War II economic history. Developing countries have shown great resilience in instituting the extraordinarily painful austerity programs they have been required to introduce to reduce their debt levels. With the recent beginning of a cyclical recovery in the advanced countries, led by the U.S., commodity prices have begun to rise, exports have started to expand, and real interest rates have begun to fall. Taken together, these events will lead to an easing of the difficulties that developing countries are currently experiencing in trying to put their domestic economies in order. In time, these events will permit new investments and development programs to take advantage of the projected positive external environment.

IV. GLOBAL ECONOMIC OUTLOOK

At the beginning of the 1970s, the future of the world economy was seen not only from the perspective of almost 200 years of more or less continuing increases in per capita income, but also from the vantage point of almost 25 years of exceptional economic progress and relative political stability, compared to the period from 1914 to 1947. Mankind's economic problems were hardly "solved," but they were widely viewed as soluble in the long term. Suddenly, the experiences of the rest of the 1970s led many to develop almost an opposite vision. In the wake of a sudden end to 20 some years of high growth that preceded the decade, expectations became extraordinarily pessimistic. The Global 2000 Report to the President, prepared supposedly as a consensus of views on future trends to the end of the century, epitomized the kind of pessimism generated in the 1970s among intellectuals and citizens of the advanced industrial countries. The report argued:

If present trends continue, the world in 2000 will be more crowded, more polluted, less stable ecologically, and more vulnerable to disruption than the world we live in now. Serious stresses involving population, resources, and environment are clearly visible ahead.... Barring revolutionary changes in technology, life for most people on earth will be more precarious in 2000 than it is now.

Such extreme pessimism seems to us unjustified. Risks and difficulties exist in any endeavor, grand or small, but attempts to deal with such challenges also exist. To put the argument in summary form, the challenges of population, resources, and the environment referred to above are probably manageable, and more likely to be manageable by assuming

* Council on Environmental Quality and Department of State, The Global 2000 Report to the President, Vol. 1 (Washington, D.C.: USGPO, 1980), p. 1.

they are and then trying to deal with specific aspects of these problems in a more or less normal manner, rather than by adopting an alarmist approach.*

Pessimism about long-term prospects for mankind as a whole had its counterpart in the 1970s in pessimism about medium-term economic prospects. There seemed at the time to be no end to stagflation, and in the minds of many, no way to end it. In the adverse economic environment of the mid-1970s, strong social and political resistance developed against economic changes that had previously seemed inevitable--indeed desirable. This resistance to change contributed to an intensification of various global economic problems, e.g., to the abrupt shifts in the competitiveness of major industries in different countries and the worldwide increase in inflation rates described in the preceding section. Moreover, since investment is by definition based on an expectation of future returns, the pessimistic expectations prevalent in the 1970s almost certainly discouraged investment, thereby also delaying the adjustment process. In time, as noted in earlier sections of this paper, resistance to change gave way to an increased willingness to

* For an elaboration of this viewpoint, see Herman Kahn, William Brown, and Leon Martel, The Next 200 Years (New York: William Morrow & Company, Inc., 1976). Two studies commissioned by The Organisation for Economic Co-operation and Development (OECD) and published in the late 1970s also sought to assess the many expectations of pessimism then current in advanced industrial countries, and both found such pessimism unwarranted. See Paul W. McCracken, et al., Towards Full Employment and Price Stability (Paris: Organisation for Economic Co-operation and Development, June 1977), and OECD, Interfutures, Facing the Future: Mastering the Probable and Managing the Unpredictable op. cit. Though taken note of at the time by specialists, and in our view largely borne out by subsequent events, these studies have had no measurable impact on public opinion in general.

adjust to new conditions, either because circumstances eventually left "no choice" or because new and more positive opportunities were gradually perceived as a better alternative than the status quo.

This increased willingness to adjust doubtless reflects a more positive approach to the medium- and long-term future than was apparent a decade ago. As a result, global economic prospects to the end of the century have become more favorable than they appeared in the 1970s. Moreover, actual improvements in global economic performance have begun to show up, most visibly, to date, in the cyclical recovery that began in the U.S. in 1983. In our view, this recovery is likely to be unusually sustained, and gradually to blend into what we refer to below as a structural recovery. This revitalization in U.S. performance will stimulate similar improvements elsewhere, initially more in Japan than in Western Europe. Developing countries will greatly benefit from this upturn in the growth rates of the advanced countries, though here, too, the benefits will come to some countries before others, and specifically first to the NICs of East and Southeast Asia and only later, as debt servicing burdens are eased, to Brazil, Mexico, and other potentially high-growth developing countries outside of Asia. The following sections discuss U.S. and Japanese prospects in some detail, followed by discussions of Western Europe and developing countries, and finally by a summary of global economic prospects

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A. The U.S. Recovery

Beginning in 1979, as the U.S. shifted to tight money policies in spite of rising unemployment, U.S. and global inflation rates began to fall (refer back to Figure 5). The shift in attitudes that brought

about this willingness to fight inflation as well as unemployment, combined with a working out of a certain degree of structural changes in spite of continued resistance by some groups, set the stage for the cyclical recovery that began in the U.S. in 1983. If the positive forces that have set this cyclical recovery in motion are reinforced over the ensuing 2-3 years, and at the same time not by a rekindling of inflation (or by fears of inflation manifested in rising interest rates), this cyclical recovery would gradually blend into a structural recovery, i.e., a working out of the remaining legacies of the stagflation of the 1970s and, equally importantly, an increasing recognition, in expectations as well as existing trends, of significantly greater opportunities for growth than in the 1970s. The cyclical recovery that has occurred in the U.S. to date stems in part, from the monetary and fiscal stimulus of the 1981-83 period and in part from the emerging influence of various underlying economic changes that more than offset the negative effects of high real interest rates and low capacity utilization.

The likelihood of this cyclical recovery's becoming a sustained expansion depends, first of all, on the continuing strength of these underlying changes currently driving the U.S. economy in a positive direction. These changes include:

(1) Improvements in the labor force, particularly among the large number of people who began working for the first time in the 1970s, e.g., baby boom adults, females, and minorities; as these people acquire more experience, they will also achieve greater-than-average productivity gains. This medium term trend will have particularly important effects

over the next decade, with its positive contribution slacking off toward the end of the century.

(2) New technologies and many innovations stemming from these, as illustrated by developments already taking place in computers, telecommunications, energy production and conservation, etc., which as they unfold will almost certainly continue to lead to large increases in productivity; similar revolutions are widely expected from biotechnologies, new materials, and space, though these fields are in earlier stages of development.* The positive effects of these new technologies have especially high potential in the short-to-medium-term, and show strong potential well past the end of the century.

(3) Modernization of services, both on the supply and the demand side, as technological change and the application of modern management techniques make the provision of previously expensive services much more affordable or the services now being provided of a much higher quality (e.g., new and varied financial services, privately-financed job re-training, and medical diagnostics, to name a few). Like technological innovation, modernization of services is a long-term positive trend extending, and perhaps intensifying, past the end of the century.

(4) Adjustments in capital stock to the energy price changes and new environmental standards of the 1970s; as these adjustments are

* A clustering of technological innovations in energy, environmental control, and related areas can be attributed to the timing in the late 1960s and early 1970s of concentrated research devoted to solving specific problems. The results of this research are now leading to a vast array of commercial products being introduced. The explosion of computer/telecommunication applications is the result of a long-term trend of cost reductions and technical improvements. Its timing is in part simply fortuitous, in part driven by competition.

gradually completed, an increasing share of new investment dollars can be applied directly to productivity-increasing uses. The positive aspects of structural adjustment to past events are of relatively recent origin, and will remain particularly important for another 5-10 years.

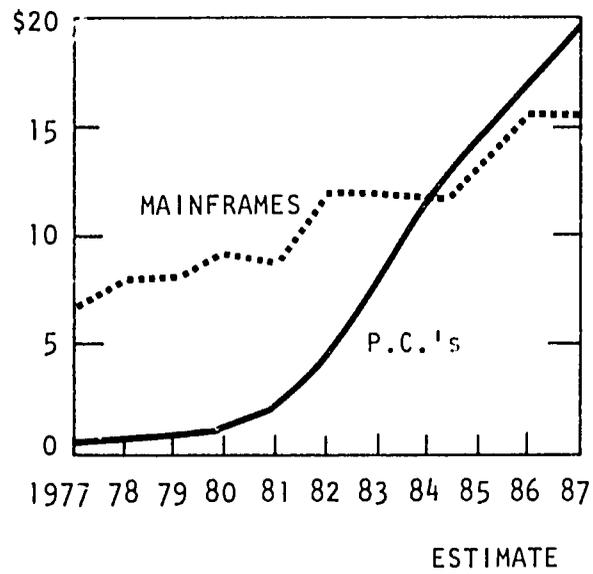
(5) Improved government policies, particularly tax and regulatory policies that support sustained economic growth more than the sometimes explicitly anti-business policies of the 1970s. These improvements in policy should persist for at least a decade, and may last longer in conjunction with succeeding policies. The growth stimulus stemming from policy improvements will be concentrated in the next few years, with some positive effects indefinitely.

(6) More generally, and sometimes as a cause and sometimes as an effect of the above trends, new values and attitudes that promote entrepreneurship, risk-taking, and self-reliance; for example, as the increasing interest in computers over the past two years suggests, the blossoming of new technologies, previously widely feared as a cause of unsettling change, is now generally welcomed as a cause of desirable change. (Figure 6 shows one recent compilation of trends in computer sales.)

Such shifts in attitudes, which if reinforced become a shift in expectations as well, have profoundly positive implications for future investment prospects. By the same token, in order for the U.S. recovery to be sustained to the late 1980s, attitudes toward investment have to be positive, and actual investments based on such positive attitudes have to be made. A virtuous cycle in which increased confidence about

Figure 6

U.S. SALES OF MAINFRAME
AND PERSONAL COMPUTERS,
IN BILLIONS



SOURCE: INTERNATIONAL DATA CORPORATION.

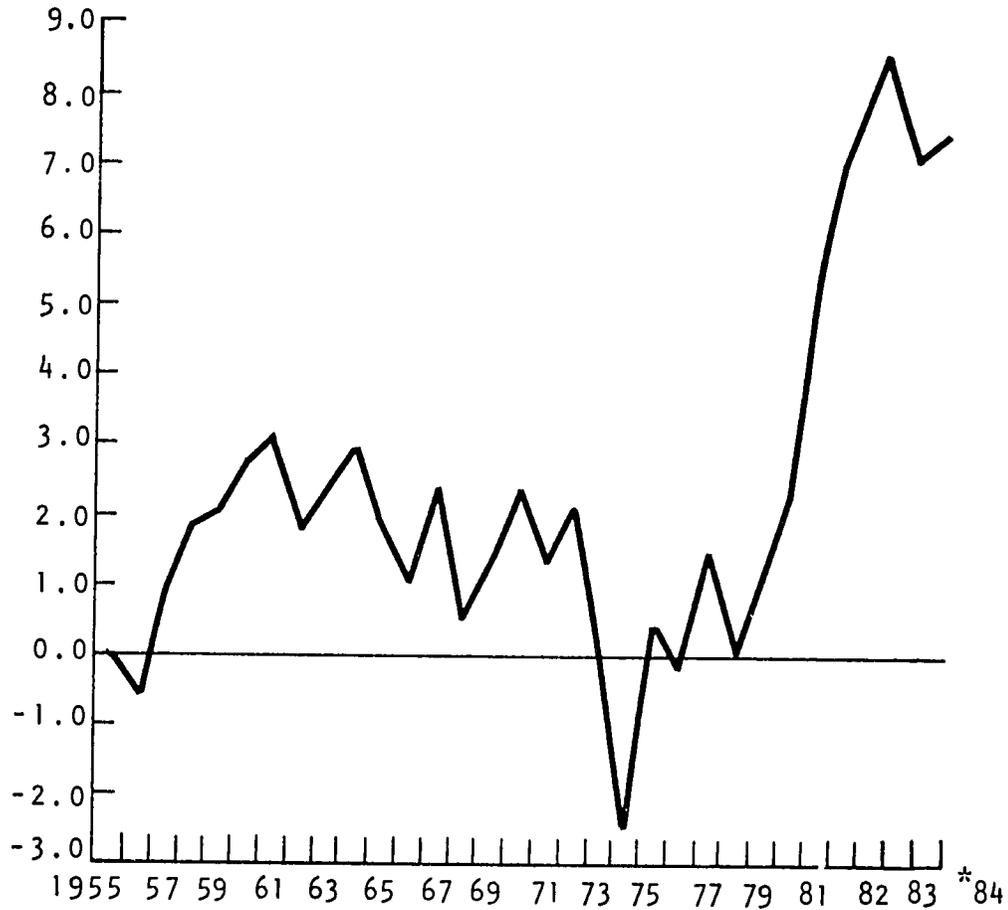
the future stimulates increased (and broadened) investment, leading to higher growth and improved productivity performance that preserves the gains from such growth and increases confidence about the future, remains essential to genuine economic prosperity over the long run.

Otherwise, the consumer spending on which the current cyclical recovery has largely been based would run its course, and the recovery would falter--or, if stimulated by monetary expansion, would be subject to a boom/bust cycle based on excessively speculative consumer or investment demand. Worse yet, if positive attitudes toward investment have not arisen and actual investments have not been made when the economy slows down in cyclical terms, which at some point it must do in any case, the groundwork for new industries needed to keep the economy on course in structural terms beyond the 1980s would not yet have been laid. Under these circumstances, the "go-stop" pattern of the early 1980s would be repeated; the investments enabling the economy to maintain a sustained and more stable growth pattern than that of the 1970s would be delayed still longer. Such a delay in new investment might leave sectors of the U.S. economy still further behind competitive changes taking place elsewhere in the world, particularly Japan.

The biggest single factor undermining the confidence needed to sustain the current recovery to the late 1980s is the fear of a return to high inflation rates. To judge by the continued high level of long-term interest rates--in real terms they remain extremely high (see Figure 7)--Americans continue to think that the dramatic decline in inflation since 1980 is only temporary, and that to protect themselves

Figure 7

REAL INTEREST RATE ON TEN YEAR
TREASURY SECURITIES, 1955 - 1984



NOTE: "REAL INTEREST" IS THE DIFFERENCE BETWEEN THE TREASURY SECURITY AVERAGE ANNUAL RATE AND THE FOURTH QUARTER TO FOURTH QUARTER CHANGE IN THE GROSS NATIONAL PRODUCT IMPLICIT PRICE DEFLATOR.

*ESTIMATE FOR THE FIRST QUARTER OF 1984.

SOURCE: EXECUTIVE OFFICE OF THE PRESIDENT, ECONOMIC REPORT OF THE PRESIDENT (FEBRUARY 1984), P. 298; U.S. DEPARTMENT OF COMMERCE, BUSINESS CONDITIONS DIGEST (AUGUST 1983), P. 84, NEW YORK TIMES (MARCH 21, 1984), P. D1 AND D6; BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, FEDERAL RESERVE BULLETIN (VARIOUS EDITIONS).

against an erosion in the value of their money, lenders need a so-called inflation premium built into (and exerting upward pressure on) interest rates. Although higher corporate profits resulting from cyclical recovery and new tax provisions will enable much new investment to be financed out of retained earnings and a number of new financing methods (e.g., variable rate loans, asset-based loans, etc.) have been devised to facilitate investment in new projects in spite of high real interest rates, sustained growth of the sort that would produce a structural recovery probably still requires that these high rates decline toward their historically normal levels, i.e., between 2-3 percent in real terms. For this to happen, projected federal budget deficits will have to be brought down as a percent of GNP and--again equally importantly--to be perceived in the short term as likely to come down. Without such a perception, real interest rates would remain high, either because of expectations of renewed inflation resulting from the financing of future deficits through monetary expansion or because, with savings rates remaining low, government borrowing to finance currently projected deficits would produce a crowding out of proposed private-sector borrowings.

Indeed, since the overall relationship between expectations and behavior is largely conjectural, and perhaps inherently uncertain, no one can say for sure exactly what combination of spending cuts and tax increases would be sufficient, or of suitable quality, to generate an expectation that future inflation rates will be kept low. Any number of proposals are currently being discussed, ranging from those that would rescind some of the income tax cuts of 1981-83 to those that

would keep these cuts intact but raise revenue through energy, sumptuary, or other excise taxes or through so-called consumption taxes designed to steer the tax system away from its present bias against savings and investment. What is clear is that the continued jockeying for position between the executive and legislative branches of government--aggravated in recent years by the rivalry between a Republican Administration on the one hand and Democratic Congressional leaders and presidential candidates on the other--adds to the risk of renewed inflation. If nothing else, the consequent delay in coming to grips with the deficit creates expectations that the government as a whole (meaning the executive and legislative branches taken together) is incapable of bringing the deficit under tighter control. With an expansionary fiscal policy even during a recovery, the burden of controlling inflation falls all the more on the monetary policy of the Federal Reserve Board, which is already overburdened and perhaps unable for technical reasons to influence the supply of money in as rational or predictable a manner as would be desired.*

Moreover, for the past two years, large capital inflows from abroad, attracted by high U.S. interest rates and by an alleged safe-haven value to short-term investment in the U.S. have made credit conditions easier than domestic policies alone would have suggested. These inflows also have kept the exchange value of the dollar high, which has hurt

*The nature of U.S. financial markets is changing so rapidly that the various targets, indicators, and instruments of monetary policy have become increasingly difficult to measure or work with. This leads to unavoidable miscalculations in attempts to second-guess the rate of monetary growth, which in turn leads to under- and over-shooting of policy-based targets.

U.S. exports, particularly of manufactured goods, and led to record deficits in the balance of merchandise trade and on the current account (encompassing goods and services). At some point, however, this inflow of "extra" savings is likely to decline, as foreigners also come to see projected federal budget deficits as "too high," or as they simply see investment opportunities in their own or third countries as more worthwhile than those they have previously been making in the U.S. When these inflows begin to decline, the exchange value of the dollar is also likely to fall, adding actual inflationary pressures as prices of imported goods and import-competing goods rise. U.S. exports would begin to recover and imports to slow down, and the U.S. trade and current account balances would move toward surplus (or at least less of a deficit position), thereby stimulating economic growth. But with the capital inflows that previously cushioned domestic credit markets falling off and with inflation possibly on the rise at the same time, tending to raise U.S. interest rates, the net effect of these various cross trends on interest rates and on the economy as a whole is hard to predict. Much depends on qualitative factors and on expectations. For example, should short-term capital inflows fall "too much," perhaps in response to a drop in the exchange value of the dollar or even for fear of such a drop, short-term U.S. interest rates could suddenly spurt upward, and possibly spill over into increased long-term rates, thereby reducing investment.

As of early 1984, with a cyclical recovery well underway, whatever benefits might have stemmed from an expansionary fiscal policy during the 1981-82 recession are by now almost certainly offset by the fears

generated by large and possibly still increasing budget deficits. If-- and as of this writing, it is a big "if," but one that logic suggests will happen eventually--the executive and legislative branches do fashion a package of spending cuts and tax increases, either before or after the 1984 elections, that creates an expectation of an end to growing deficits as a percent of GNP, whatever increases in interest rates may then occur would likely be small enough to avoid nullifying the positive effects of the various underlying changes referred to above. As is often the case with "good news," the positive factors in the structure of the labor force, in technology and the uses to which new technologies are put, in adaptations to new conditions, in government policies, and in attitudes toward the future tend to be undervalued simply because the offsetting negative forces--most notably, at the moment, the fear of an aborted recovery--seem all too evident. In fact, as the current cyclical recovery shows, such positive forces do exist, and can have an extremely strong impact once the negative forces bottling them up are lessened or eliminated. Thus, if residual fears of inflation, as manifested in fears of higher interest rates that stem in turn from fears of continued increases in federal budget deficits, are brought down, the positive forces that have been at work even while such fears existed would become even more effective, enabling growth in the U.S. to average about 4 percent a year to 1988 before falling to roughly 3 percent a year to the end of the century.*

* For another version of a similar scenario, see Herman Kahn, The Coming Boom: Economic, Political, and Social (New York: Simon and Schuster, 1982). The 4 percent and 3 percent forecasts mentioned above should be compared to a recent consensus forecast of average annual growth of 3.6 percent for 1984-89 and 3.2 percent for 1990-94. See Blue Chip Economic Indicators, Vol. 8, No. 10, October 10, 1983.

Under these circumstances, a structural recovery of the U.S. economy would take place. Consumer spending, which stimulated the cyclical recovery, would be followed by new investment and exports as the main stimulants to continued growth. A virtuous cycle would replace, at least for some years, the vicious cycle of stagflation and low or "go-stop" growth that lasted almost a decade following the 1973-74 oil and other commodity price increases. With the cyclical recovery blending into a structural recovery, and a generally upward trend being sustained for an unusually long period, expectations for the U.S. economy even beyond the 1980s would, at the very least, be considerably more favorable than the pessimistic views characteristic of the 1970s, and possibly favorable enough, as such a recovery unfolded, to create new positive expectations that would help carry the generally upward trend forward into the 1990s.

B. Japanese Economic Prospects

Japan's rate of economic growth, while much lower now than in the 1950s and 1960s, is still higher than the average for other OECD countries and is likely to remain higher for some years hence. Having come to think that they have caught up to the previously developed, predominantly Western countries in terms of a flow of income, Japanese are now likely to want to catch up to these other countries in terms of a stock of wealth as well.* To be sure, simply seeking a higher

* This distinction between catching up to the West in terms of a flow of income and catching up in terms of a stock of wealth comes from a recently published "vision" in the series of such reports sponsored by the Ministry of International Trade and Industry. See Sangyō kōzō shingikai [Industrial Structure Council] Hachi jū nendai no tōsan seisaku

rate of economic growth than other advanced countries is not the same as achieving it. Still, Japan's record of growth throughout the postwar period, including the past decade when global economic performance was much weaker than the preceding 25 years, suggests that Japan is more likely than not to achieve the goals it sets for itself, or at least to fall less short of these goals than other countries fall short of their goals. Moreover, if the current U.S. recovery is sustained to the late 1980s, which, as discussed above, seems to us to be likely, the Japanese economy would receive a significant real and psychological lift. In terms of short-run effects, i.e., another 1-2 years, the U.S. market would remain generally open to imports and the volume of imports would be increasing.* This would stimulate Japanese exports to the U.S. and to other countries, particularly other countries in the Asia-Pacific region, whose own exports to the U.S. would also be growing rapidly. More importantly, for the medium-term, i.e., 3-5

bijōn [Vision of Trade and Industry Policy for the 1980s] (Tokyo: Ministry of International Trade and Industry, April 1980), pp. 25-27.

The possibility that Japan's rate of economic growth would remain higher than those of other countries for a longer period of time than was then generally expected, together with the specific suggestion that Japan might pass the U.S. in per capita income by the year 2000, were major points in Herman Kahn, The Emerging Japanese Superstate: Challenge and Response (Englewood Cliffs, NJ: Prentice-Hall, 1970). For more recent projections of why and how Japan might continue to achieve higher growth rates than other advanced industrial countries for some years hence, see Norman Macrae, "Must Japan Slow?" The Economist, February 23, 1980, pp. Survey 1-42, and Thomas Pepper, "The Continuing Japanese Challenge," in Yusaku Furuhashi, ed., Japan and the United States in a Turbulent World: Myths and Reality (West Babylon, NY: KCG Productions, Inc., 1981).

* In a period of sustained recovery, the U.S. economy would need to remain generally open to imports as a means of containing inflation. Moreover, in such a buoyant environment, new jobs would be created quickly enough to neutralize most of the sectoral pressures for protectionism that would otherwise develop.

years, a sustained U.S. recovery would serve as an "umbrella" under which Japanese domestic demand would be able to expand more rapidly than over the past decade. Japan's pent-up demand for housing and other infrastructure needs would be freed from an otherwise ever-present and self-defeating fear of insufficient global demand or of U.S. protectionism, and the growth stimulus stemming from exports to the U.S. would soon be outstripped by the stimulus of a domestic Japanese recovery, leading in turn to more imports from the U.S. and other Asia-Pacific countries.

As is currently the case in the U.S. as well, evaluations of Japan's economic potential, by both Japanese and foreigners, turn to a large extent on expectations. Since recent rates of economic growth in Japan have fallen well short of previous performances, current expectations about future growth have been considerably scaled down. The past three years did register exceptionally slow growth for Japan, at least by previous standards: actual growth in 1981 was 3.8 percent, in 1982 3.0 percent, and the most recent OECD estimate for 1983 is 3.0 percent.* Although this poorer-than-expected performance has been used to support long-standing criticisms of various allegedly "optimistic" medium-term projections, official forecasts continue to assume, in our view correctly, that Japan will maintain a higher growth rate, on average, than other advanced industrial countries to the end of the century.** Again,

*OECD Economic Outlook 34, op. cit., p. 18.

** For a useful summary of existing official and semi-official expectations of Japanese economic performance and of structural changes likely to occur between now and the end of the century, see Planning Bureau, Economic Planning Agency, Nisennen no Nippon (Tokyo: Nihon keizai shimbun sha, 1982), translated and published in English under the title Japan in the Year 2000 (Tokyo: The Japan Times, Ltd., 1983).

as in the U.S. case, weaknesses in the Japanese economy are likely to be offset by major economic strengths, discussed below:

First, in spite of the lessened expectations noted above, Japanese thinking, institutions, and political processes all retain a stronger bias toward high economic growth than those of other advanced industrial countries. This preference for higher rather than lower growth rates is evident in the continuing drive to improve living standards, in the strong and continuing commitment by both business and government to higher technology manufacturing, and in the continuation of a "survival" mind-set in public opinion, i.e., the notion that extraordinary efforts are still needed to avoid catastrophe and consequent manifestations of this notion in various policy decisions. Japanese have also developed a clear commitment to move toward an information-based society.* In both policy discussions and private sector strategic planning discussions, Japanese make almost no distinction between information-intensive manufacturing activities and information-intensive service activities; both are seen as a natural continuation of the economic development that has occurred to date. Resistance to the loss of manufacturing capabilities once thought to be critical to Japan's economic health has largely been avoided by rapid moves into still newer manufacturing

* This bias toward high growth is manifested in numerous aspects of Japanese economic policy, particularly in tax policy, industrial policies for both high technology and declining industries, and until recently, in the financial structure. For a detailed discussion, see Jimmy W. Wheeler, Merit E. Janow, Thomas Pepper, Japanese Industrial Development Policies in the 1980s: Implications for U.S. Trade and Investment, HI-3470-RR (Croton-on-Hudson, NY: Hudson Institute, October 1982).

** See Sangyō kōzō Shingikai, op. cit.

and service activities, or by the use of capital exports to establish equity stakes in older-style manufacturing capabilities located abroad. In practice, of course, the usual sticky questions remain as to what particular manufacturing industries (or companies) will have to be phased out. These questions also raise potentially serious political problems. On balance, however, there is a broad consensus in Japan for continued high economic growth and a willingness to seek this high growth by means of whatever industrial structure shifts are called for by the logic of changing technologies and changing comparative advantage vis-a-vis other countries, both advanced and developing.

Secondly, Japanese firms have begun a long process of adopting new technologies and management techniques to the country's low-productivity distribution sector, e.g., in convenience stores, automated banking, fast-food chains, and the like. Japan continues to maintain a larger proportion of both output and employment in agriculture and manufacturing than most other advanced industrial countries. Similarly, Japan's financial and distribution systems have failed to evolve as rapidly as its manufacturing sector. Such lags are characteristic of countries that develop later than others, as Japan has. The contrasts are perhaps more striking in Japan's case, in part because, since the more modernized parts of the manufacturing sector grew so rapidly in the postwar years, the differences between the more modern and the more traditional sectors are clearly visible. More importantly, insofar as the future is concerned, the maturation of lagging sectors, such as distribution, is likely to generate significant future growth (as is also the case in the U.S. for a wide range of services). Japan

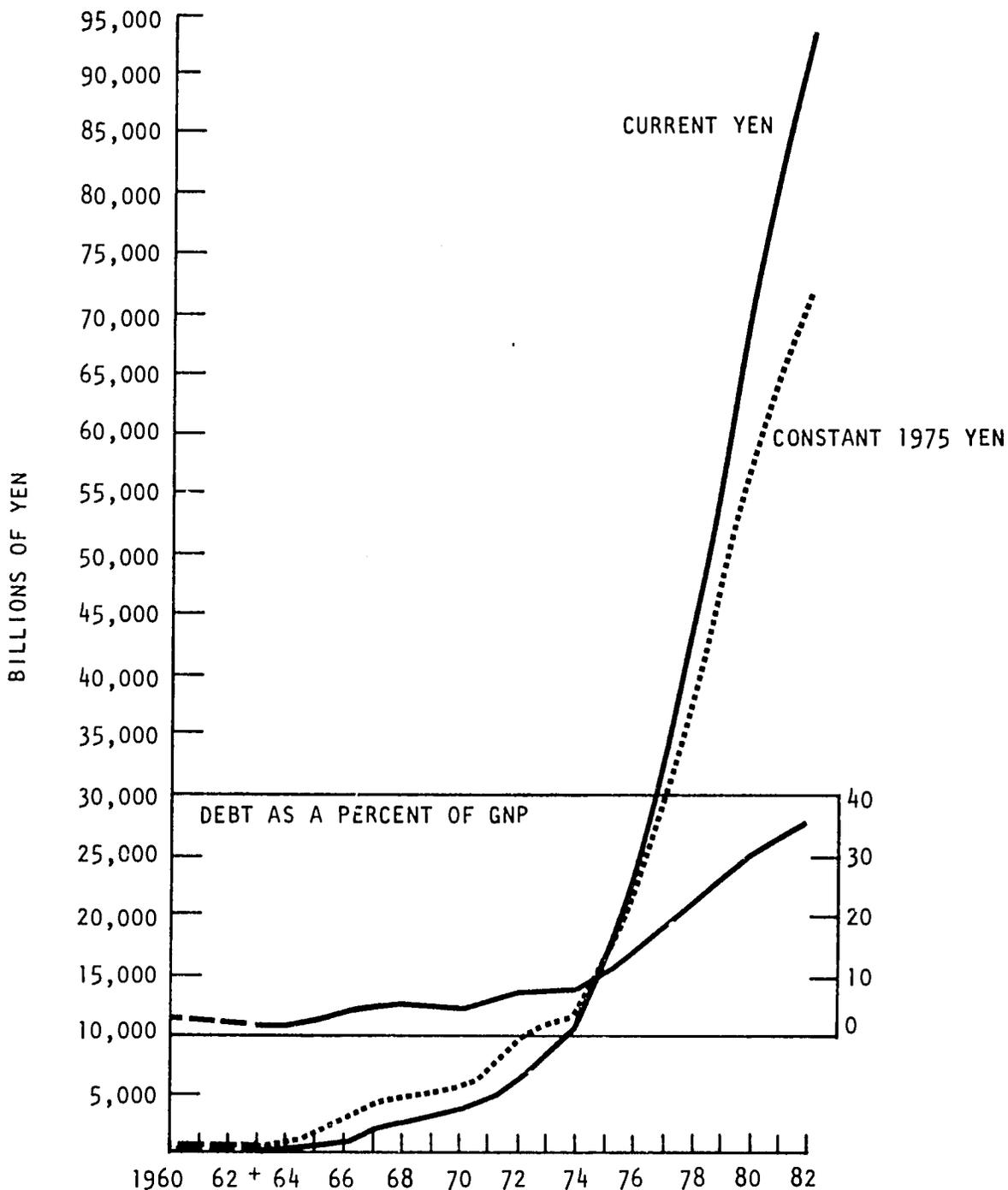
remains sufficiently growth oriented that far from seeing lagging sectors primarily as liabilities, they almost naturally regard these sectors as opportunities for future expansion.

Thirdly, new sources of domestic and international demand are emerging, and will be particularly strong if the current U.S. recovery is sustained. Indeed, given the existing cost competitiveness of many Japanese industries and the levels of capacity utilization, the economy as a whole can respond rapidly to improvements in the global economic environment. For example, the Japanese automobile, shipbuilding, and consumer electronic industries would all respond rapidly to an extended world recovery, meaning that Japan would be among the main beneficiaries of a sustained U.S. recovery. Such a recovery also would provide a base for increased infrastructure development and for the continued development of such industries as computers and other advanced electronics, plant and equipment exports, and machine tools, among others.

Japan does face major economic weaknesses. For one thing, both monetary and fiscal policies are severely constrained by domestic and international considerations. Following a precipitous increase in government budget deficits in the 1970s (see Figure 8), Japan has little scope for stimulative, Keynesian-style fiscal policies. In this respect, both the U.S. and Japan are in similar positions, except that Japan's budget deficits, as a percent of GNP, increased earlier than the U.S.'s and Japan's accumulated debt is now considerably higher, as a percent of GNP. Because Japan's savings rate is so much higher than the U.S.'s (in 1982 Japan's gross saving was nearly 32 percent of GDP, as against 16 percent for the U.S.), these higher budget deficits and the country's

Figure 8

JAPAN: DIRECT CENTRAL GOVERNMENT DEBT
(INTERNAL BONDS, END OF YEAR)
1960-1982



+MAY 1963

SOURCE: STATISTICS DEPARTMENT, THE BANK OF JAPAN, ECONOMIC STATISTICS MONTHLY, VARIOUS ISSUES; JAPAN, MINISTRY OF FINANCE; AND IMF, INTERNATIONAL FINANCIAL STATISTICS, VARIOUS ISSUES.

accumulated debt level can be accommodated with less immediate concern about inflation or a crowding out of private investment.* On the other hand, with domestic demand growing only slowly for several years, there is little scope in the short-term for tax increases that would reduce the government's need to finance its deficits in the domestic capital markets. Although the last two Prime Ministers have both made a point of saying they would reduce "unnecessary" government spending through administrative rationalization--and undertake this effort before raising taxes--the goal is still a long way from being attained as it flies in the face of the usual political resistance from entrenched special interests.

Japan's monetary policy is similarly constrained. Though international forces have greatly reduced the degree to which Japanese capital markets are insulated from world capital markets, the formal structure of the Japanese market remains highly regulated, segmented, and for these reasons relatively inflexible. When unregulated U.S. interest rates rose between 1977 and 1981 to levels roughly double those in Japan's regulated market, Japan experienced a substantial outflow of

* For recent comparative data on U.S. and Japanese budget deficits and debt levels and savings rates, see OECD Economic Outlook 34, op. cit., p. 33, p. 43, and p. 155.

Advocates of increased stimulation not only argue that Japan's high savings rate means that its budget deficits are much less inflationary than those in other countries; they also usually see higher growth as the only way, short of supposedly infeasible (and deflationary) tax increases, of ever bringing the deficit down. By contrast, advocates of restraint argue that the deficit must be pared before increased stimulation can even be considered. Otherwise, this argument runs, future deficits will become so large that, even with Japan's high savings rate, they would be inflationary in themselves or would crowd out private investment.

short-term capital, which in turn helped to weaken the value of the yen beyond all expectations. Although the interest rate differential narrowed after 1981, it remained a significant incentive for Japanese to continue to invest in dollar-based assets. As long as domestic demand remains weak, Japanese monetary authorities cannot afford to raise interest rates significantly to strengthen the yen, and in the face of a continuing disparity between Japan's still-regulated (and artificially low) domestic interest rates and the higher rates prevailing abroad, the authorities cannot afford to stimulate domestic demand by lowering Japanese rates either.

Thus, both fiscal and monetary policy are boxed in by existing conditions. Somewhat like the U.S., if for different reasons, Japan has little choice, in its macroeconomic policy, but to wait out a longer-than-desirable period within which to squeeze previous excesses out of the system, i.e., to work off some of its accumulated debt or at least to prevent debt levels from continuing to increase as a percent of GNP. The deficit as a percent of GNP fell from 4.1 percent in 1982 to an estimated 3.4 percent in 1983, and is projected to decline to 2.5 percent in 1984.* Such slow but steady improvement, early in a domestic recovery, suggests that the medium-term outlook for stabilizing Japan's public finance problems is encouraging.

A second major weakness in the Japanese economy is the substantial pressure for disinvestment in a broad range of declining industries. The most notable examples are petrochemicals, synthetic fibers, steel,

* See OECD Economic Outlook 34, op. cit. p.33.

aluminum, and other nonferrous metals. The restructuring of these industries will obviously restrain economic growth. Japan will face more problems in this area than in the past because its level of economic development has reached a point where previously well-established basic manufacturing industries are becoming uncompetitive. However, Japan's ability to restructure declining industries has been, and seems likely to remain, superior to that of other advanced countries. Japanese firms have considerable experience in moving resources rapidly from activities with declining potential to activities with growing potential. Typically, the labor force cooperates with such restructuring plans, although the terms on which this cooperation is obtained have become tougher than in the past. Moreover, those parts of a declining sector that are retained have been, and are likely to continue to be, the more productive plants or firms in the industry.

Actually, much of the success of any restructuring effort depends on current macroeconomic conditions. In a buoyant economic environment, companies can generate sufficient cash flow to enable industries undergoing structural change to compensate for the adjustments they must make by investing in new product lines or in new areas entirely. Through most of the postwar period, Japan was able to restructure industries relatively rapidly because aggregate growth was exceptionally high. The initial, deflationary aspects of the restructuring process could be accomplished quickly. Meanwhile, as newly-released factors of production were re-employed in areas of higher productivity, the restructuring process quickly took on a positive character, stimulating rather than restraining new growth. New products with high growth potential were

generated; new investments took up the slack left by declining industries. In the likely global environment of the rest of the century, assuming the current U.S. recovery is sustained to the late 1980s, the Japanese economy is likely to experience a similarly sustained upturn based on increased spending on domestic infrastructure and higher technology manufactured goods and services. In this environment, the deflationary aspects of restructuring away from basic manufacturing industries are likely to be offset by the stimulative effects of new investment.

A third important weakness in the Japanese economy stems from the protectionist steps already taken by the U.S. and Western Europe, which do limit export growth in some key industries, notably automobiles, steel, and videotape recorders, and the ever-present possibility that such protectionist pressures will be intensified. In 1977 and again in 1981, exports accounted for an overwhelming share of Japanese demand growth, contributing, in turn, to increased friction between Japan and her major trading partners. As a result, the potential for continued rapid export growth is limited by a political constraint against further trade friction, particularly with regard to such previously important export-oriented industries as automobiles and steel, where the effects on unemployment in other countries have already been strong. This political constraint against renewed (i.e., increased) export growth has led, in fact, to increased exports of Japanese capital, either to establish plants in the U.S. or to participate in portfolio investment in the U.S. because comparable opportunities in Japan appear less worthwhile. To this extent, the protectionist steps taken by the U.S. so far (e.g., quotas on auto imports) have been deflationary in Japan,

in the sense of diverting prospective domestic investment projects located abroad. In spite of the job-enhancing effects these protectionist steps appear to have had in the U.S. (in the short-term), they may even have been deflationary to both the U.S. and Japan because of the demand-reducing effect of higher prices in the U.S. and the degree to which Japanese have been deterred from investing out of fear of even more severe restrictions.* Much of this political problem will ease, but not disappear, as the U.S. recovery proceeds.

A fourth weakness in the Japanese economy stems from Japan's high rate of domestic savings, which if coupled with weak investment demand and a slow rate of growth for disposable income, as has been the case in recent years, tends to restrain domestic growth. This is the so called savings trap issue, i.e., when planned savings exceed the actual demand for investment funds (both from private investment spending and government borrowing), more funds are leaking out of the aggregate flow of income than are being put back in; as a result, aggregate demand and aggregate income both fall. Given Japan's continuing high savings rate, data during the past several years might be interpreted to support fears of a "savings trap." However, a persistent "savings trap" is in our view unlikely. The cyclical recovery in the U.S. and the likely subsequent recovery in Japan will expand investment and consumer demand, and thereby ease the fiscal and monetary constraints operating on

* Quotas on auto imports to the U.S. have been self-defeating in another sense: Japanese producers, faced with quantitative restrictions, shifted their export mix to upscale models where profit margins are higher, resulting in little or no gain in balance of payments terms, and in greater competition for those segments of the market where U.S. producers previously were stronger.

the Japanese economy at the moment. Moreover, after doing without it for many years, the Japanese economy is making increasing use of consumer credit, which will significantly alter traditional spending habits and in effect stimulate consumer spending. In spite of pressures for administrative rationalization, government demand will continue to grow, especially for infrastructure investment. Private demand for infrastructure investment will also grow, e.g., in the housing industry, which, in spite of its several-year slump, has considerable potential simply because the quality of Japan's existing housing is so low, compared with other advanced industrial countries. Finally, as the U.S. and Japanese recoveries proceed, many industries will want to accelerate their restructuring plans to be able to take advantage of improving conditions. Thus, we see the "savings trap" issue as a short-term problem induced mainly by the stagflationary conditions of the past decade, particularly the 1980-81 global recession, and as largely soluble in the course of the pickup we anticipate for the rest of the 1980s.

To summarize, Japan's economic weaknesses are mainly short term; its strengths are mainly longer term. Assuming the current U.S. recovery is sustained to the late 1980s, growth in Japanese real GNP will remain slow by Japanese standards in 1984, perhaps 4.0 percent, but rise to a 4-6 percent annual average through the late 1980s before falling back to a 4-5 percent range through the end of the century.

C. Advanced Country Prospects

Since the U.S. and Japanese economies, taken together, account for more than half of the gross national products of the advanced industrial countries and for more than a third of gross world product, the sustained recovery they are likely to experience through the late 1980s would stimulate growth in Western Europe and other advanced industrial countries through a variety of trade and financial linkages. Indeed, such stimulus is already helping to support the beginnings of a cyclical recovery in Europe, Canada, and Australia. Naturally, improved domestic performance will be needed if this stimulus is to produce more than a temporary improvement in economic growth in these other advanced countries. In Europe's case, the key issue is whether the modest recovery now just beginning will be accompanied by long overdue structural changes, particularly by greater flexibility in labor markets, which, as in the U.S. and Japan, would enable an initial upturn to be converted into a sustained economic expansion. The alternative would be a continuation of the sluggish growth that has been the pattern in Europe since the 1974-75 recession, and in the longer term, a continued loss of competitiveness and dynamism relative to the U.S., Japan, and the rapidly growing developing countries of the Asia-Pacific region.

The advanced countries as a group, including or excluding the U.S. and Japan, grew more rapidly in 1983 than was generally expected at the beginning of the year. Growth prospects for 1984 are still more positive, but even at that, the growth that is likely in most European countries is unlikely to be able to reduce substantially the high rates of unemployment that developed during the past decade of sluggish growth. The

European outlook beyond 1984 is a matter of substantial controversy. As Table 9 shows, the OECD, which in the past was known for an optimistic bias in its overall forecast, has become notably more pessimistic about the two largest European economies, West Germany and France, than a consensus of forty forecasters (including the OECD itself) for both 1984 and 1985. The OECD forecast for Japan is also more pessimistic than the consensus for 1984 and 1985, and for the U.S. in 1985. The consensus foresees a typical slowing of growth in the U.S. and Canada, which began their cyclical recoveries earlier than other countries, a comparably typical acceleration of growth in Japan, and a slower but nonetheless steady increase in growth for Europe during the same period.*

The difference between the OECD and the consensus forecast reflects different judgments about many short term conditions, but perhaps more importantly, different judgments of the impact of medium- and long-term trends on a typical business cycle recovery. For example, the OECD forecast incorporates a number of recent trends that would normally suggest improved medium-term growth prospects, such as declining inflation rates, improvements in profit margins, declines in real wage growth relative to productivity growth, and a general improvement in business and consumer confidence.**

* Of the four largest European economies only the U.K. whose recovery began sooner than the others, is forecast to slow down in 1985 from 1984.

** See OECD Economic Outlook 34, op. cit., for further details on these trends and an excellent survey of the degree to which various industrial countries have or have not been able to correct many of the macro-economic obstacles to economic growth that have plagued them for the past decade. For a more personal, and therefore in many ways even more illuminating discussion of this same material, see Sylvia Ostry, "The World Economy in 1983: Marking Time," Foreign Affairs, America and the World 1983, Vol. 62, No. 3, pp. 533-560. Ms. Ostry was head of the

Table 9

ECONOMIC GROWTH OUTLOOK, BIG-SEVEN INDUSTRIAL COUNTRIES: 1984-85*

	1982 GNP Share	History			Forecast			
		1971-1981 Average	1982	1983 ^e	1984		1985	
					OECD	Consensus	OECD**	Consensus
United States	44.7	2.9	-1.9	3.5	5.0	4.9	3.0	3.5
Canada	4.5	3.8	-4.4	3.0	5.0	4.4	2.5	3.6
Japan	16.5	4.8	3.0	3.0	4.0	4.4	3.0	4.3
Federal Republic of Germany	10.2	2.5	-1.1	1.3	2.0	2.7	2.3	2.8
France	8.4	3.1	1.9	0.5	0.0	0.9	1.5	2.3
Italy	5.4	3.0	-0.3	-1.5	2.0	1.9	1.3	2.5
United Kingdom	7.3	1.4	2.0	2.5	2.3	2.3	2.0	2.0
Eur 4	31.3	2.5	0.5	1.0	1.5	2.0	1.8	2.5
Big 7	100	3.1	-0.5	2.5	3.8	3.9	2.8	3.3

*All data and forecasts are reported rounded off to the nearest tenth of a percent.

**OECD forecast for 1985 is the first half only, over the second half of 1984.

SOURCES: History from OECD Economic Outlook, 34 (December 1983), p. 18; Forecasts from *ibid.*, and Blue Chip Economic World Scan, Vol. IV, No. 2 (February 15, 1984), pp. 7-8.

These recent improvements in both cyclical and structural trends, combined with the positive outlook we foresee for the U.S. and Japanese economies, provide the basis for our own projection that the structural recovery expected in the U.S. and Japan will be followed by similar, if less comprehensive, structural changes in Western Europe.

The quantitative forecast cited above go only to 1985. Our own longer term projection, which is explicitly based on judgments about medium and long-term trends, including what economist would conventionally define as social and political trends, differs from what would appear to be a consensus of current public expectations. The latter suggest a continuation of "more-of-the-same," meaning either renewed inflation and possibly a return to stagflation or a "go-stop" or "stop-go" pattern, which would include frequent and sharp recessions and which over the medium term would amount to continued sluggish growth along the lines of the second half of the 1970s. We see a stronger medium-term outlook than "more-of-the-same" in part because of our view of the fundamental strengths of the U.S. and Japanese economies and in part because of the positive effects of the various medium- and long-term trends described in Sections II and III above.

In the U.S., the pace of growth has been and will continue to be restrained by high federal budget deficits, which contribute more than other single factor to the continuation of high real interest rates. As noted in the above discussion of the U.S. recovery, many investment

Economic and Statistics Department of the OECD from January 1982 to September 1983. Her article for Foreign Affairs was written in her capacity as Senior Research Fellow at the Institute for Research on Public Policy in Ottawa from September to December 1983, and the views expressed are characterized as her own.

opportunities are being pursued in spite of these high interest rates-- financed more than in the past from internal funds and equity issues that in turn are based on improved cash flows and net profits stemming in part from tax law changes. Moreover, as also suggested above, policy compromises between the executive and legislative branches of government will probably lead to a "mid-course correction" that tilts current expectations in a more positive direction. In Japan, gradual reductions in government deficits, combined with improved prospects in the U.S. (which absorb some 30 percent of Japanese exports) and a continued expansion of private consumption, are laying the foundation for a sustained, domestic-based upturn.* In Europe, recent limited moves toward reducing government-imposed costs and interventions in some countries will encourage further moves in this direction as the long-delayed cyclical recovery picks up momentum. Combined with further structural adjustments, these moves will probably lead to a slow but steady improvement in European economic performance somewhat above the growth rates expected in 1984-85. In particular, the strong interdependence of the European economies is likely to lead to positive interaction effects as the diverse performance of individual countries in 1983-1984 becomes more uniform. Moreover, prospects are good that advanced country exports to developing countries will begin to pick up by early 1985, since the preceding two years of improved performance in the advanced countries will by then have eased debt service burdens and expanded export earnings.

* See Long Term Credit Bank of Japan, Ltd., LTCB Economic Outlook, February 1984, for an example of generally upward adjustment in forecasts made by leading economic organizations in Japan and a discussion of how various factors have led to these revised forecasts.

By the end of 1985, when the U.S. and Japanese recoveries will have begun to slow down in cyclical terms, the then increasingly positive performance in Europe and in developing countries will serve to sustain a global economic expansion into the late 1980s. Some recessions will doubtless occur in some countries during this period and through the late 1980s and early 1990s, though in an environment in which the fundamental strengths of the U.S. and Japanese economies are making their weight felt, such recessions may amount to no more than growth recessions. Under these circumstances--and, again, on the assumption of a generally sustained upturn in U.S. performance, in the absence of a return to a "go-stop" pattern in the U.S.--the average cyclical movements in the world economy will be much less volatile than those experienced in the post-1973 decade. Such improved stability in macroeconomic performance would in itself improve confidence in expectations about future medium- and long-term performance.*

Greater stability in overall growth patterns implies that both inflationary peaks and high unemployment troughs will be moderated. When overlain on a positive growth trend, this more stable growth pattern than that since the late-1960s would tend to extend recoveries and to shorten both the length and depth of recessions. This stability would also contribute to greater willingness on the part of individuals and

* An under-estimation of various interaction effects among countries has plagued economic analysis and policy making since the late-1960s. Such models as the OECD Interlink, and the Wharton LINK, among others, now explicitly incorporate many direct trade and financial transactions among countries. Nevertheless, the indirect and attitudinal interactions among trade, exchange rates, interest rates, inflation, and investment remain highly conjectural, and may well be as or more important than the direct transactions.

firms to take a longer-term viewpoint toward prospective investment--a key qualitative factor influencing future economic performance.

The sources of instability that have plagued the past 12-15 years have not, of course, totally disappeared. However, the world does seem to us to be distinctly less susceptible to such instability than during the past decade. The effects of high and volatile inflation rates and boom bust cycles experienced in the 1970s were intensified by the expansion of trade and financial market linkages among the advanced countries, beginning in the late 1960s. These linkages have not gone away; if anything, they have expanded still further. Yet, there is now much greater understanding of these linkages among policymakers. Moreover, a commitment to resist inflationary increases in liquidity--the monetarist component of an "Age of Friedman"--has become generally accepted among the advanced countries. Although policymakers will still make mistakes, either in their analysis of problems or in their willingness to pursue politically or socially difficult, policies, they will try to avoid actions that have unexpected international consequences. This is true if only because the models on which decisions are now made include much greater coverage of international linkages than in the past.

A major source of instability in international markets in the 1970s was, of course, the two dramatic energy price increases of 1973-74 and 1979-80. The global sensitivity to energy price variations has not disappeared, but it has become less serious as OPEC's share of world oil production has declined (refer back to Figure 4). The global economy is now less vulnerable to sudden oil price increases than in the past, thus in order to experience a shock of the magnitude of those experienced

in the 1970s, a drastic reduction in OPEC-based supplies would be required. Such a reduction could result from a revolution in Saudi Arabia, which for whatever reasons stopped oil production for an extended period of time. One could also postulate some sort of major cartel-induced reduction in oil supplies to the world market in order to force oil prices up again, although this is a difficult action to justify in terms of the domestic politics of the OPEC countries, whose economies are already suffering from the world recession. Another external factor that contributed to the instability of the past 12-15 years was the breakdown of the fixed exchange rate system and the need to adjust to a system of floating exchange rates. This change did increase the uncertainty of international trade, and thus tended to increase the transaction costs of trade at least temporarily.

In the absence of major new "shocks" or fundamental policy mistakes, these sources of instabilities, though they exist, do not seem to us strong enough to offset the positive forces currently operating on the economies of the advanced and developing countries. The higher and more stable growth rates likely to occur during the rest of the 1980s would avoid the speculative excesses of the 1970s, thereby reinforcing the initial strengths of these positive factors.

D. Developing Country Prospects

In contrast to the period during and after the 1974-75 recession, when developing countries as a whole were able to maintain generally high growth rates through a combination of access to foreign loans and export expansion, current prospects for developing country growth are

constrained by the legacies of the sluggish performance of the advanced countries throughout the post-1973 decade. Export prospects are only now turning up. Debt service burdens are much higher, and the rates of interest being paid on existing and new debt are extremely high in real terms.* These short-term constraints will prevent developing countries as a group from returning quickly to their past high rates of growth; average performance will be extremely sensitive to average performance in the advanced countries. Even in light of the cautiously optimistic short- and medium-term outlook for the advanced countries presented above, at least three to five years (from 1983) will be required to work off the more serious constraints in developing country growth.

Two short-term problems will affect how quickly most of the developing countries can return to growth rates comparable to those experienced in the 1960s and early 1970s:

1. The world debt crisis: Finding enough credits to carry the debt service burdens of the next two to three years will not be easy. The impact of this problem will vary according to the specific circumstances of particular countries; for example, the growth rates of Brazil and Mexico will be adversely affected in the short run.
2. Barriers to exports: The degree to which developing countries will be able to maintain and expand exports to the advanced countries will depend on whether the latter resort to increased protectionism and the pace at which generalized preferences are withdrawn as certain nations become more highly developed.

The resolution of the first of these problems will in turn depend on the pace at which real interest rates decline and commodity prices rise,

* As noted above, one of the reasons for the large rise in borrowing in the mid-1970s was the low and even negative real interest rates on commercial loans (measured in terms of rate of growth of their export prices).

easing debt service burdens. Resolution of the second of these problems depends primarily on whether the current U.S. recovery is in fact sustained till the late 1980s.

This short- to medium-term forecast of a slow return to high rates of economic growth in developing countries is also based on the various long-term factors working to promote economic growth in a historical sense. These include, for example, a political commitment, or more often a political imperative, to maintain the process of development at a pace sufficient to satisfy minimal (and rising) expectations among the citizenry of developing countries. This commitment to growth, when it exists and operates effectively, is typically combined with an increased understanding of ways in which the goal of continued development can be attained. In this regard, the rapidly growing labor force in developing countries can be an important asset, as well as a potential source of domestic instability. By keeping wages relatively low, a large pool of labor can strengthen competitiveness and attract foreign investment. At the same time that the total number of workers is growing, many of them are becoming better educated, more highly skilled, and therefore more productive. Similarly, the spread of technology brings a new element of dynamism into developing countries, opening up a wide range of new investment opportunities, both in terms of a shift of some industries out of the advanced countries and in terms of new innovations appropriate for developing countries.

In general, policies that depend more on pragmatism than ideology are being increasingly adopted in developing countries, with important long-term implications favoring increased economic growth. Recent research,

indicates that those developing nations that are open to imports^{*} and that have relatively free price systems^{**} have fared better in terms of growth than those that tried to close their economies to the rest of the world and/or strictly regulate wages and prices. Moreover, countries with lower inflation rates and those that brought inflation under control most rapidly have also fared better in terms of growth (refer back to Table 1). This newly-developed evidence is beginning to force changes in policy in other countries, if only because international development assistance and financial institutions are modifying their own evaluation procedures to take account of it as well. For example, the IMF is broadening its concept of conditionality, going beyond a traditional emphasis on macroeconomic constraint to press countries that seek IMF assistance to move away from rigid economic controls and toward an opening of their economies to the rest of the world.

As noted above, this prognosis for developing countries is to a large extent dependent on the extent to which the U.S., Japan, and other advanced countries actually achieve the growth projected for them in the cautiously optimistic forecast that is also presented above. This overall scenario seems to us likely if the U.S. recovery is sustained at an average of about 4 percent real growth per year through the late

^{*} See Anne O. Krueger, Trade and Employment in Developing Countries, Synthesis and Conclusions (Chicago: University of Chicago Press, 1983). Ms. Krueger elaborated on her research in a talk to the President's Task Force on International Private Enterprise at the State Department, September 20, 1983.

^{**} See World Bank, World Development Report 1983 (New York: Oxford University Press, 1982), p. 57. The research on which this is based is reported in R. Agarwala, "Price Distortions and Growth," World Bank Staff Working Paper, No. 575, and in an article of the same title in Finance & Development, Vol. 21, No. 1, March 1984.

1980s. New opportunities for growth will of course require appropriate efforts in the interim to enable them to be realized. Yet the global economic environment is almost certain to be more favorable in the late 1980s and 1990s than during the past decade. The burden of taking advantage of this environment will still be, as it has always been, on individual countries themselves, which must create a domestic environment conducive to economic progress. This applies to both advanced and developing countries. The latter are likely to continue to grow faster than the advanced countries during the next decade, but be able to return to average annual growth rates over 5 percent only after another two or three years have elapsed.

Indeed, the degree to which individual countries will experience improvements in domestic conditions over the short- to medium-term is highly variable. Most of the developing countries of East and Southeast Asia will respond quickly to the recovery in the advanced countries, in part because they are most sensitive to U.S. and Japanese economic conditions, but in large part because, on average, they have fewer growth constraints to work off than other developing countries and maintain a domestic economic environment that actively seeks to take advantage of favorable external conditions. Through a recently developed "demonstration effect," selected provinces and industries in the Peoples' Republic of China (PRC) will also experience significant growth and trade expansion. In this sense, it is important to see China in disaggregated terms, since the populations and workforces in most provinces and many industrial sectors exceed those of most nations. Selected countries elsewhere in the world can also be expected to do well, though with a lag behind Asia

in most cases. In Latin America, for example, Brazil, Mexico, Colombia, and Venezuela are adjusting, albeit painfully, to various short-term problems, and should begin to improve their performance substantially beginning in 1985; high rates of growth in these countries will probably not be seen again until after 1986. In South Asia, both Sri Lanka and selected regions and industries in India show positive signs of being able to take advantage of the recovery in the advanced countries. In Africa, only Algeria, Kenya, Gabon, and perhaps Senegal appear to have domestic economies that are adjusting or performing well; the rest of sub-Saharan Africa presents a gloomy prospect for successful economic development in the near future, and perhaps even to the end of the century.

Many domestic political and economic events could combine to change these expectations but, barring such events, the countries noted above, plus a few others such as Turkey, will be the first to respond to economic recovery in the advanced countries; other developing countries will respond, more slowly. After a slow recovery in 1984 and 1985, growth in developing countries overall through the end of the century is likely to average 5-6 percent annually, based on expected trends in labor force, technology, education and skill levels, investment opportunities, and the above forecast of recovery in the advanced countries.

E. Global Summary

One often hears the view--and we ourselves have provided a version of it above--that the U.S. must undergo a vigorous recovery to propel the rest of the world into a period of improved economic growth. While there are times and ways in which the U.S. can be critically important

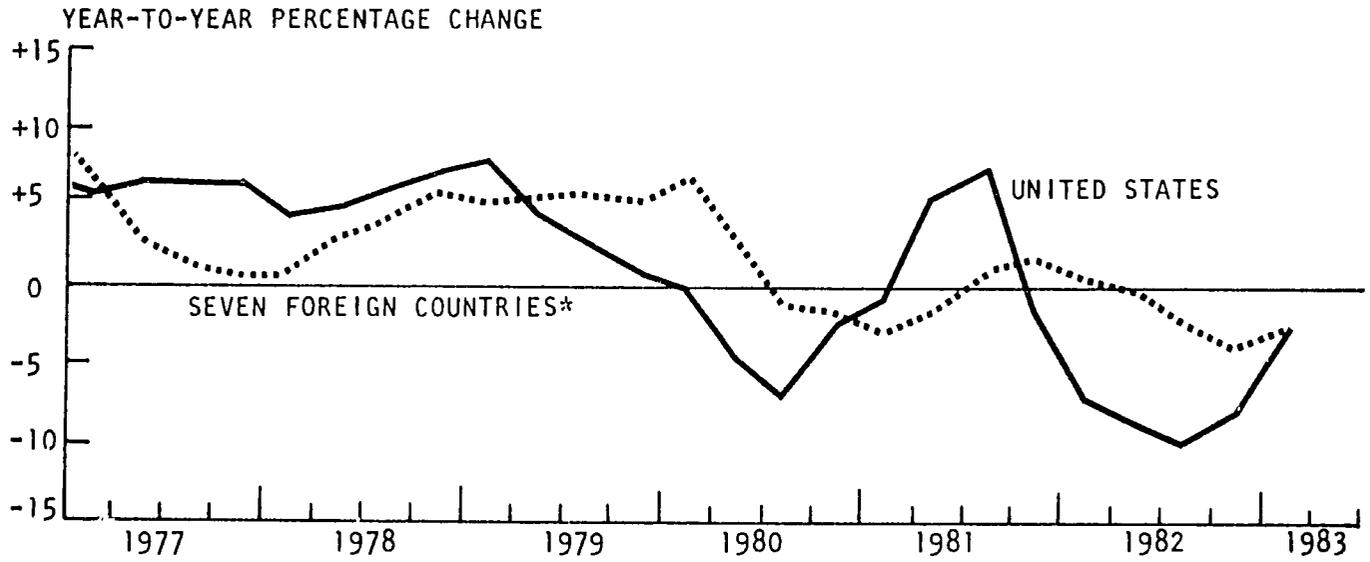
as an engine of growth for the rest of the world, there is also a tendency to apply this notion far too generally. The lack of a U.S. recovery can prevent a global recovery, but it cannot propel one into existence without other countries' being able to generate their own recoveries as well. Exaggerated impressions of U.S. capabilities can encourage inaction in nations that seek excuses to avoid changing their own practices. Such impressions can also distract attention from opportunities that are emerging in other parts of the world--opportunities that can be fully exploited only by local responses.

The notion of the U.S. as an engine of growth in cyclical terms is appropriate in recognizing the short-run responses to the severe recession of 1981-82. The timing and the severity of this recession--but not its occurrence--was largely the result of tight money policies in the U.S. As Figure 9 shows, the U.S. led the world into the 1981-82 recession. Similarly, monetary expansion at the bottom of the recession was particularly significant in the U.S.--partly out of an understandable (or unavoidable) desire to avoid jeopardizing world stability in the face of a severe debt crisis. This monetary expansion, coupled with tax cuts and the normal cyclical processes that produce a rebound from a period of sharp decline, means that the U.S. is now leading the world out of the same recession it had led the world into a year and a half earlier.

While short-run economic performance in advanced and developing countries has hinged on recent experiences in the U.S. to an unusual degree, this does not mean that longer-term patterns of economic growth will be solely or even primarily dependent on what happens in the U.S.

Figure 9

INDUSTRIAL PRODUCTION IN THE UNITED STATES
AND OTHER INDUSTRIAL COUNTRIES



* CANADA, FRANCE, F.R. GERMANY, ITALY, JAPAN, NETHERLANDS, UNITED KINGDOM.

SOURCE: U.S. DEPARTMENT OF COMMERCE, INTERNATIONAL ECONOMIC INDICATORS, JUNE 1983.

The stimulus for the cyclical recovery in the U.S. is self-limiting, since the high growth rates that characterize the initial recovery phase recede as a matter of course. For growth to proceed in other countries, they, too, must experience cyclical recoveries of their own--driven largely by domestic factors.

Exaggerated views of the importance of the U.S. in global growth in cyclical terms is perhaps a holdover from the immediate postwar period, when the U.S. accounted for about half of gross world product. With the U.S. share of gross world product now below one-quarter, this relationship is now much less significant. However, the major factor that would enable the global as well as the U.S. economy to experience a sustained upturn is the prospect that structural adjustments supporting long-term growth will emerge in other countries as well as the U.S. The U.S. can lead the rest of the world in this respect, in the sense of serving as a model of flexibility and social mobility, manifested perhaps most visibly by entrepreneurship and technological innovations.

Notions that future global economic performance will be no better than "more-of-the-same" seem to us to be based on incorrect extrapolations from the dominant trends of the post-1973 decade. Those who take this position seem to rest their arguments on various combinations of the following points: (1) Large-scale shocks to the world economy as a whole, along the lines of the oil price increases of 1973-74 and 1979-81, will continue; (2) the political will in Western countries is too weak to control inflation except by periodically driving up interest rates until they are high enough to induce a severe recession, at which point the

cycle is repeated; (3) a seemingly permanent decline is occurring in technological progress itself, manifested by declining R&D expenditures or some even more general failure in the expansion of knowledge necessary for economic development; (4) the unwillingness to adjust in Western Europe, combined with the global debt problems, will abort the U.S. and Japanese recoveries and prevent growth from spreading to the rest of the world; or (5) the U.S. recovery itself will be cut short by an inability to control government deficits, which factor alone will prevent a global recovery.

In general--and with obvious exceptions for details--the weight of existing evidence seems to us to fail to support these arguments. As discussed previously, OPEC is now reeling from an oversupply of oil and reduced demand brought about by the earlier price increases. Under these circumstances, OPEC will have a difficult time preventing prices from falling even further, let alone engineering another large increase. For this reason, a new energy "shock," on the order and duration of previous price increases, seems unlikely in the absence of serious political disruptions that cut off oil shipments from major suppliers for an extended period of time. Whatever one's personal view of current British, West German, Japanese or U.S. policies--or even of the apparent difficulty that legislative bodies have in controlling entitlement and other welfare programs--it is going too far, in our view, to conclude that there is a general loss of political will to fight inflation. If anything, there is increasing evidence of the opposite tendency. The citizens of the above four and, increasingly, other advanced countries seem willing to tolerate a heavy dose of anti-inflationary policies in spite of continuing

high levels of unemployment--a preference that has in fact led to lower inflation rates.

Moreover, there is little "hard" evidence that technological progress itself is slowing down appreciably, or that the whole process of economic development is slowing down in a meaningful way--again, if anything the evidence shows the opposite trend. Although, as noted above, European countries continue to resist structural adjustments more than the U.S. and Japan, important changes have begun to be made in European attitudes. While Europe's recovery from the low growth of the past decade will lag behind the U.S. and Japan, it will in time occur, if to a lesser extent. Indeed, Europe's later recovery may then provide added strength to overall world growth, as the U.S. and Japan slow down somewhat from their initially high growth rates. This, together with underlying structural changes in the U.S., Japan, and Europe, suggests a smoother pattern of growth than the boom-bust patterns of the past decade.

A similar slow-but-steadily-improving pattern is likely to be followed by developing countries--slow but positive adjustment for three to five years, with a return to more vigorous progress thereafter; this, too, would contribute to a stretched-out global recovery, blending almost imperceptibly into a period through the end of the century of much more stable economic progress than in the past 15 years. Higher or lower growth rates than the above estimates are of course possible, but the more likely alternatives are those described in various sections above. The most important of the less likely alternatives is a "go-stop" pattern, triggered by an inability of the U.S. to resolve its budget deficit problem, leading in turn to a further rise in real interest rates in 1984 and a recession in 1985.

Our basic global scenario through the end of the century is one of economic growth in both the advanced and developing countries that will be more rapid than experienced during the period from 1973 to 1983, but less rapid than during the period from 1947 to 1973. Inflation will naturally rise and fall with cyclical conditions, but either against a more-or-less steady trend, or possibly a ratcheting downward, at least in the advanced countries. Estimated growth rates for this scenario are provided in Table 10, along with those provided by the World Bank in its most recent annual World Development Report. The latter provides a reasonable surrogate for consensus views. Our basic scenario resembles the World Bank's middle scenario, though ours is slightly more optimistic about the ability of developing countries to generate growth separately from the advanced countries after 1990.*

* Our projections are presented as a range, to emphasize the inherent inaccuracies of long-term projections even under the best of conditions.

Table 10

PAST AND PROJECTED GROWTH OF GDP, 1960-95
(AVERAGE ANNUAL PERCENTAGE CHANGE)

	<u>1960-73</u>	<u>1973-80</u>	<u>1980-82</u>	<u>1982-85</u>	<u>WORLD BANK</u>			<u>HUDSON</u>	
					<u>1985-1995</u>			<u>1984-1990</u>	<u>1991-2000</u>
					<u>LOW</u>	<u>CENTRAL</u>	<u>HIGH</u>		
ALL DEVELOPING COUNTRIES	6.0	4.7	1.9	4.4	4.7	5.5	6.2	5.0 to 6.0	5.5 to 6.5
INDUSTRIAL COUNTRIES	5.1	2.5	0.4	3.0	2.5	3.7	5.0	3.5 to 4.5	3.0 to 4.0

SOURCE: WORLD BANK, WORLD DEVELOPMENT REPORT, 1983, p. 27, AND HUDSON INSTITUTE.

V. IMPLICATIONS FOR DEVELOPMENT POLICY

The single most important implication of the above analysis is that development assistance will be provided in a world economic environment that is expanding at a rate above that of the past decade, though not as rapidly as in the period between 1947 and 1973. This global recovery is being led initially by the United States, which remains an important (though not the only) stimulant to overall world growth. Japan, Western Europe, and the best-performing developing countries have much greater impact on this growth than in the past. This environment will provide greater opportunities for developing countries generally, to raise their rates of economic growth and improve their standards of living. However, the burden for taking advantage of this environment will remain with individual countries themselves.

Yet, as preceding sections of this report argued, the once-prevalent notion that the developed countries would "pull up" the developing countries in a steady progression is at best only one part of a much more complex process. The record of both the mid to late 1970s and of the early 1980's shows that the concept of a one-way "pull" from developed to developing countries is greatly oversimplified. In the first case, the continued high growth of developing countries, relative to what was then being achieved in the developed countries, enabled the global recession to be much less severe. In the second case, the debt problems of many developing countries required them to follow deflationary policies, whose effects were limited by the desire of the industrial countries which intensified the industrial country recession. Though still dominated by the impact of industrial country conditions, there is much more of a two-way interaction than ever before.

Assuming, however, that the stronger of these two flows continues to be from developed to developing countries, the continued economic development of the advanced industrial countries remains critically important for the developing countries. To put the point more starkly, if the industrial countries were to satisfy themselves with growth rates of between 0-2 percent a year over the long term, believing this was sufficient to maintain a satisfactory standard of living for themselves, many of today's developing countries would find it very difficult to break out of the historic poverty with which they are still plagued. In conjunction with other processes such as the structural adjustments underway in the U.S. and other advanced countries and the spread of new technologies discussed above, the economic performance of the advanced countries will help to create an environment more conducive to improved growth in developing countries than any alternative environment.

Another implication of this discussion stems from the contemporary record of countries with open, market-oriented economies, as against those with more closed or administered economic systems: the former have shown themselves to perform better and to react more flexibly to changes in the external economic environment than the latter. While this much could be presumed in an abstract way based on economic theory, the record of development experiences through the late 1970s is now extensive enough to establish strong and contemporary empirical evidence of this phenomenon. On the assumption that world trade growth is once again likely to expand more rapidly than output, which we believe is a reasonable expectation, countries with open, market-oriented policies will be better equipped to take advantage of export opportunities and

thus are more likely to benefit from this trade growth than countries with closed or administered economic systems.

In this environment, development assistance programs can be especially useful in helping countries take advantage of the external environment through the promotion of a vigorous, outward-looking private sector. Recipients of foreign assistance should be encouraged to promote entrepreneurial activity through market-based pricing policies, e.g., in domestic distribution systems, agricultural markets, and import policies. Market-based pricing policies can also be promoted by supporting institution building and by policies using indirect incentives that reduce centralized or bureaucratic control of economic decisions. A key objective of such efforts is to create a sustainable private-sector that permits the market to determine--wherever possible--the best avenues for growth. An active market mechanism and increased private sector activity in developing countries is all the more important because the debt crisis has reduced the role of commercial bank lending for purposes of financing balance of payments deficits. In the future, developing countries will have to rely more heavily on other sources of international finance, such as private direct investment, bond markets and other private sources of loan funds, international institutions, and government to government loans.

Another mechanism to promote market based, entrepreneurial activity is the use of incentives which permit local organizations or businesses to have a greater say in the use of assistance funds than would otherwise be the case with direct centralized government control. The effectiveness of these incentives has been demonstrated by the success of programs

such as the "Saemaul" movement in South Korea and BAPPENAS in Indonesia, both of which emphasized the role of regional or local participation in economic planning and resource allocation.

The changing structure of industry and technologies portends the need for considerable flexibility in adjusting domestic production. This suggests extensive opportunities for joint ventures among firms for licensing, production, and distribution, including ways in which various firms can benefit from assistance from local organizations, and through public and private sector cooperation with foreign firms.

The increased importance of market-oriented policies is also supported by the shift in economic thinking both in the advanced countries and in multi-lateral institutions from an "Age of Keynes" to an "Age of Friedman," meaning a greater recognition of the need to implement and maintain anti-inflation policies and to rely heavily on market-based solutions to major changes in the economic environment. In this "Age of Friedman," there will probably be less international transmission of inflation than in the past decade, and somewhat more policy discretion vis-a-vis inflation in developing countries. The influence of monetarism has encouraged capital inflows to the U.S., mainly because of the strength of the U.S. dollar in recent years. This has had unavoidably deflationary results for developing countries, but this problem should moderate somewhat as the dollar declines. Even at its worst, the trend had stimulative aspects to it through increased exports to the U.S. in response to the strong dollar and to the cyclical recovery in the U.S. An "Age of Friedman" has also influenced recent changes in IMF conditionality. Constraints on IMF borrowing now often include microeconomic, as well as the tradition-

al macroeconomic, requirements, e.g., greater pressure for freer price movements and greater latitude for private sector activities in recipient countries than in the past.

At the same time, developing countries continue to face many downside risks. The ability of developing countries to benefit from the resumption of worldwide economic growth, and the degree of growth that is possible, will be significantly affected by the level of real interest rates. At present, real interest rates are much higher than the real rates of growth for most economies. The result is that debt burdens would continue to rise in relation to GDP, making the financing of infrastructure development, export industries, and other projects increasingly difficult. In our view, prospects on balance are for a substantial reduction in real interest rates during the next several years, as expectations adjust to reduced rates of inflation and the U.S. and other nations make progress in reducing budget deficits as a percent of GNP. However, certain factors could lead to the continuation of high real interest rates, compared to the long-run historical average, e.g., the lowering of savings rates because of high marginal tax rates at upper income levels in the advanced countries and the overhang of already existing debt burdens in a number of countries. Since even a temporary increase in nominal interest rates could undermine recovery in some developing countries, progress toward reducing budget deficits in the U.S. and other advanced nations can make a major contribution to developing country prospects. Moreover, efforts at tax restructuring, which reduce the effects that taxes have in pushing up interest rates and in this way encourage increased savings, can make an important contribution to the long-run financial climate in which developing countries have to operate.

Given the continued growth in absolute population size in some developing countries, population planning should continue to be one component of development assistance. However, development assistance planners should recognize that the overall rate of world population growth is declining. Further decreases in population growth are more likely to be attributable to social changes that accompany economic growth than to any specific population planning programs, though such programs can be particularly important.

Nonetheless, because of high rates of population growth in the past, an important population-related problem for the rest of the century is a large and growing labor force in most developing countries for whom jobs must be found. Thus, employment generation and employment planning (including programs to discourage massive urban migration) have become as or more important than population planning in the traditional sense. Labor force pressures will also mean that many developing countries, even while growing rapidly, will continue to be attractive as sources of inexpensive labor.

Energy costs should no longer be as important in inhibiting economic growth as they were in the 1970s. Energy prices are likely to stabilize, or even decline in real terms, through the end of the century. Thus, assistance programs should be wary of financing or otherwise encouraging alternative energy projects that rely for their economic justification on assumptions of significantly increased world oil prices.

The global debt "crisis," in the sense of an imminent collapse of the international banking system, has receded, and been replaced by global debt "problems." For example, a number of debtor countries have adopted

severe austerity programs that strain their economic, political, and social systems, and will almost certainly curtail their economic growth in the short term. Development assistance programs should be sensitive to these strains, and consider whether the timing and allocation of funds might be altered as a means of cushioning the impact of such austerity measures.

Correspondingly, the international capital market will be reluctant during this adjustment period to supply badly-needed additional funds to developing countries. Should this reluctance lead to a sustained reduction in private sector lending, the growth prospects of many developing countries would drop dramatically. Development assistance programs may find it useful to respond to this potential problem by trying to promote further private sector initiatives. One way of doing this, in light of the reluctance of lenders to place further loans in some developing countries, is to encourage placement of equity and non-bank-based loan funds in these countries through risk-pooling programs. Equity-based funds are especially valuable in that they provide developing countries access to foreign capital without an immediate debt service burden; remittances would be based on earnings.

Future technology trends suggest that development assistance programs might usefully devote more of their resources to assisting developing countries in taking advantage of--and avoiding the potential pitfalls of--the explosion in technologies that seems certain to ensue over the next decade. Technology may offer some unique opportunities for developing countries, but only if it is properly absorbed and utilized. The management of technologies and the analysis of "appropriate" technologies, especially with regard to employment generation, will become increasingly important.