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TURKISH DEVELOPMENT PROSPECTS AND POLICIES IN LIGHT OF EXPERIENCE ELSEWHERE

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A Rand Note
PREFACE

This Note was prepared as a paper for the European-American Workshop on "The Security of Turkey and Its Allies: Self Development and Interdependence," held in Istanbul, Turkey, on September 10-12, 1979.

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Finally, Jack Vogel's editorial assistance has resulted in a much smoother draft than that to which the Workshop members were originally exposed.
SUMMARY

What are the conditions of sustained national economic development? To what extent may they apply to the economic performance, policies, and prospects of Turkey? This Note, originally presented at a conference on Turkish security and development held in Istanbul in September, 1979, addresses those questions.

Conditions of Development

Sustained development is defined as growth in real GNP of at least 7 percent a year, and of 5 percent or more annually in real per-capita GNP, maintained for at least a decade. The ingredients of development are adduced from economic theory and from the development experience over the past several decades of countries that have sought modernization with different degrees of success.

The conditions of sustained development have political and military dimensions as well as economic ones, and are discussed in those terms.

Political Dimensions

Sustained economic development requires political stability, and may also contribute to such stability. Political stability is marked by several attributes: (1) an explicit and enforced system of laws, or rules for the conduct of affairs; (2) economic transactions that are characteristically non-violent; (3) a respected system of property rights, delineating with reasonable clarity what is public and what is private property; (4) established and accepted rules for governmental succession (or, at least, the expectation of infrequent changes of regime).

Political stability implies predictability in the domains that define it. It does not imply an absence of economic and technological uncertainty. On the contrary, such uncertainty, in a competitive economy, provides incentives for innovation and increased productivity.
Economic Dimensions

The economic dimensions of development are elaborated here in terms of: (1) the prevalence of a market orientation in the nation's economy (that is, a substantial measure of economic decisionmaking in response to market forces, while government policy interventions are selective and limited, though often important); (2) the degree of inflation compatible with sustained development; (3) the extent and nature of foreign capital inflow, with emphasis on longer-term capital, and on export-related foreign investment or on marketing and licensing agreements contributing to export expansion; (4) the sources and the rate of technological advancement as a contributor to productivity gains, through the importation of both "packaged" and "unpackaged" technology; and (5) opportunities for increasing foreign exchange earnings through the export of services.

Military Dimensions

In the standard view, modernizing the military capabilities of a country creates a competition for resources, causing their diversion from developmental investment and the production of consumer goods. This is the binary guns-versus-butter argument. The issue, however, is more complex than that. In particular, complementarities may exist, or be fostered, between military and economic development. For example, economic development produces its own destabilizing pressures, often requiring military capabilities to keep them contained if economic progress is to continue. Further, in a developing country military training can create a skilled workforce and competent managers useful in a civil as well as a military setting. Finally, opportunities may exist for joint military-civilian production of goods which can benefit both sectors.

An associated issue turns on the relative costs of labor and capital in developing countries as differentiated from those costs in the industrialized countries. Such differences among countries should be reflected in the design and structuring of military forces, and in the pursuit of military modernization. An approach in developing countries that seeks to adapt advanced technology in ways that are
relatively labor-intensive will minimize the conflict between military and economic development.

Observations About Turkey

The Turkish experience suggests the need for (a) a greater degree of market orientation for Turkey's economy, and especially for Turkey's state-run economic enterprises to improve their efficiency and reduce the push of their deficits and investment demands on Turkey's recent hyperinflation; (b) reassessing foreign capital inflow with the aim of reducing Turkey's debt service burden, through greater emphasis on long-term borrowing and possibly foreign direct investment; (c) promoting the expansion of exports, with special attention to the export of construction and engineering services; (d) careful attention to the selective import of appropriate advanced technology; (e) seeking further opportunities to build complementarity between economic and military development; and (f) giving due weight to the relative prices of capital and labor in Turkey in evaluating options for force modernization.
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I. INTRODUCTION

This Note attempts to set forth briefly a set of principles or "recipes" for sustained national economic development, based both on economic theory and on development experience in various countries. The aim is to consider whether and how these recipes may apply to Turkey's economic performance, policies, and prospects.* The recipes are based, in a broad and general way, on the experience of successful modernizing countries in the international economy over the past several decades and, by counterexample, on that of the less successful countries, as well.

In Section II, I will try to summarize these recipes in terms of their political, economic, and military dimensions (with the latter construed in terms of the complementary, as well as competitive, relationships between economic development and modernization on the one hand, and the development and modernization of military capabilities on the other).

In Section III, I want to consider how Turkey's own development experience and policies relate to the recipes discussed in Section II, concluding with some tentative suggestions on how these points might be taken into account in the next phase of Turkey's economic policymaking. I wish to emphasize the tentative nature of these conclusions and suggestions. They are offered in a questing, rather than assertive, spirit by someone who is not an expert on Turkey.

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*I believe the recipes would be accepted by most people who are knowledgeable in this field, although one must be wary about the possible tautology implied by my use of the term "knowledgeable"!
II. INGREDIENTS OF SUSTAINED ECONOMIC DEVELOPMENT

What seem to be the recipes that make for sustained economic development, as they may be inferred from the experience of successful and unsuccessful development in the international economy over the past decade, supplemented or interpreted in some cases by economic theory? By "sustained economic development," I mean a high rate of real economic growth (say, at least 7 or 8 percent in the annual growth of real GNP, and perhaps 5 percent or more in the annual growth of real per capita GNP), maintained over a protracted period of at least a decade.

Of course, generalizations are hard to maintain. In part, special circumstances make each country an individual case. Special circumstances of history, institutional structure, culture, and tradition may have substantial effects on national economic development.

Nevertheless, I believe it is possible to make certain generalizations that seem confirmed by the few cases of successful economic development, and that differentiate them from the large number of unsuccessful ones.

Evidence in support of the generalizations derives mainly from these contrasts, and I will try to cite examples that illustrate particular principles. Most of the examples, and other evidence in support of the generalizations, will be drawn from the developing countries; actually, most of the principles or recipes for sustained development apply, by and large, to the advanced countries, as well. The generalizations may be likened to an architect's initial design, a sketch indicating the contours of a building which may be altered in scale and detail to fit the terrain before construction begins.

A. POLITICAL DIMENSIONS

That successful economic development is a problem of political economy, rather than "pure" economics, is no less true because it is a cliche. At the risk of oversimplifying, and of provoking controversy,
let me suggest the political conditions that seem crucial for economic development.

Sustained economic development requires political stability, although it may also contribute to such stability. As a condition for economic development, political stability has certain definite, and even measurable, attributes. They include especially the following: an explicit and enforced system of laws, or rules for the conduct of affairs; nonviolent, economic transactions; a respected system of property rights, providing with reasonable clarity a delineation of what is public and what is private property; established and accepted rules for governmental succession or, in their absence, infrequent occurrence of regime changes.

I should note here that democracies in developing countries may face particular difficulties with respect to governmental succession. Although rules for succession may be established, they may not be fully accepted. Even if accepted, excessively frequent changes of regime may hinder the continuity and effectiveness of efforts to sustain economic development. Turkey's own experience, as well as that of Mexico, Singapore and Malaysia, provides evidence both of the difficulties and of the possibilities of resolving or surmounting them.

Why is political stability so essential for sustained development? I think the answer is that political stability reduces uncertainty or, equivalently, increases predictability in the particular domains, noted above, that define it. While political uncertainty is thereby reduced, economic and technological uncertainty remain. This residual economic-technological uncertainty is ineluctable; attempts to ignore or remove it will generally backfire. The reason is that the "best" solutions to choices as to which products to produce, and which processes to use in producing them, are usually not known, and generally cannot be known, in advance. Alternatives must be developed and tested.

Typically, some degree of decentralized decisionmaking about the alternatives, and competition among them, helps assure that the best
will survive and prosper. In this sense, the residual economic uncertainty, when lodged in a competitive environment, can have a positive effect on prospects for sustained economic development because it provides an opportunity and incentive for innovation and increased productivity. It thereby provides a useful, though certainly not infallible, mechanism for distinguishing and selecting between more and less productive uses of resources. It is perhaps worth mentioning that this mechanism is typically ignored in the main body of microeconomics. The mechanism is not thereby reduced in importance.

By contrast, political uncertainty or instability does not have this growth-promoting effect. Instead, it may place in jeopardy otherwise sensible economic transactions, and provide incentives to divert resources from producing goods and services to producing political favors and insurance. Consequently, removing or reducing these forms of uncertainty (by the maintenance of political stability) is likely to contribute to development.

It should be evident, of course, that political stability is a necessary but not sufficient condition for sustained development. Sufficiency requires that political stability be accompanied or followed by the economic dimensions, to which I now turn.

B. ECONOMIC DIMENSIONS
1. Market Orientation

Sustained development seems to be closely associated with a high degree of economic decisionmaking and resource allocation in response to market forces. This is not to say that markets and market prices have the appealing characteristics associated with neoclassical models of perfect competition. Indeed, the typical product and factor markets of developing countries have even more than the usual market imperfections normally associated with the economies of developed countries. But, granting the numerous sources of market failure that inevitably result in inefficiencies in the use of resources, the
inefficiencies of non-market alternatives are typically even more pronounced. At least, this conclusion appears warranted from the contrasting experience of the few successful developing countries and the large number of unsuccessful ones; the former have typically been characterized by a more active role for market forces than one finds in less-successful developing countries. 

In other words, "non-market failure" is no less, and typically is more, of an inhibitor of development than market failure.

When one examines the development experience of the high and the low performers, it is noteworthy that the main growth-promoting effect of market forces and market prices probably does not occur through the static, allocative efficiency so cherished in standard microeconomic models. Rather, the effect of a market orientation is to set in

*I am agnostic on the point of whether a few of the centrally planned economies (perhaps Rumania or North Korea) really represent counterexamples. One question that arises is whether their real economic growth rates would actually be as high as reported if their output statistics were properly deflated and interpreted. If the meaning of "sustained economic development" is enriched to include, say, a five percent or higher annual rate of growth in per capita consumption, a further question arises as to whether any CPEs would qualify. And there is, finally, a question as to whether some CPEs have themselves begun to take advantage of what I've called "market orientation," for example, by competing in international markets against the exports of other countries.

Even if the growth rates of a few CPEs might enable them to meet the criteria of "sustained economic development," it seems clear that their developmental records have been markedly less efficient than those of the high performance LDCs, (such as Korea, Singapore, Brazil, and Taiwan) in which the role of market influences has been unquestionably larger. By efficiency, I mean simply that capital-output ratios and input-output ratios appear to have been substantially higher in the centrally planned economies than in the others. To the extent that some of the CPEs do in fact meet the criteria of sustained development, they appear to do so by virtue of mobilizing a large volume of inputs: the "big" push, rather than the efficient one. At the same time, it may be argued that there is a tradeoff between efficiency and equality in their development records. The extremes between high and low incomes and wealth may be less, and the middle incomes more closely grouped, in the successful CPEs than in the successful "market" economies. I have heard assertions, but have not seen evidence, to corroborate this point.
motion dynamic economic changes through the pressure of competition, incentives for innovation and increased productivity, and the severe screening and discipline imposed by market forces.*

This is not to say that the role of markets is or should be unfettered in the developing countries, or in developed countries. Government policy interventions have played major roles in the successful development records of Brazil, Korea, and Taiwan.** For example, agricultural prices in Korea have been pegged for the past decade at levels above the world market in order to maintain rural incomes at parity with those of urban workers and thereby to discourage excessive urbanization, as well as to provide incentives for increased agricultural output. This was a special and selective policy intervention, deliberately chosen for social and political reasons, rather than for reasons of economic efficiency. It is interesting, too, that the agricultural price supports have gradually been lowered, and are now to be removed.

Also, "infant" export industries in Korea have been initially encouraged by preferential tax treatment of their earnings. But full-cost pricing of their inputs, and gradual reduction or removal of favorable tax treatment, have generally been enforced. Import-substituting industries, though initially protected, have been forced to compete with foreign imports. Korea is currently a more "open" economy than Japan!

In each of these cases, policy interventions have been important. Also, they have usually been selective, precisely targeted, limited in number, and implemented through price incentives rather than more direct controls. The general principle remains: the market mechanism has typically played a substantial role in the economies of the most successful developing countries, thereby providing powerful incentives


** See, for example, Bela Balassa's comparisons between Brazil's and Turkey's economic policies, "Balassa's comparisons between Brazil's and Turkey's economic policies," prepared for the European-American Workshop, Istanbul, September 1979.
for innovation and efficiency, and exercising a strict discipline to filter out waste and inefficiency.

Strictly speaking, this point about market orientation is not equivalent to an argument in favor of private, rather than public enterprise. Rather the point is that neither public nor private enterprise is likely to perform efficiently in a static, allocative sense nor in a dynamic, innovative sense, without the spur and challenge of some form of market mechanism.

One reflection of the predominant market orientation of the high performing countries has been the sharp increases in their exports on world markets. Clearly, exports have to compete in world markets, and this tends to produce the discipline, screening, and incentives referred to earlier. When export expansion occurs in response to such "natural" forces and opportunities, it is surely growth-enhancing. For example, Korea's annual rate of growth in export volume between 1973 and 1978 was nearly 20 percent, and that of Taiwan nearly 15 percent, in real terms. Brazil's exports grew at an annual rate of 4.8 percent in this period, but its export growth rate was nearly 20 percent per annum in the prior 1966-73 period.*

However, I would express a slight degree of uneasiness lest the currently fashionable enthusiasm for export promotion might lead in the direction of protected (by subsidies), and fragile, export industries. This, of course, is not Turkey's current problem. In Turkey, the pendulum has swung too far and too long in the reverse direction, protecting import-substituting industries through quotas and tariffs on competing imports, while penalizing exports (e.g., through an over-valued exchange rate and rapid internal inflation). To reverse this imbalance, attention and encouragement to expanded exports is essential. Nevertheless, the warranted emphasis on export expansion should at least be accompanied by a cautionary observation: Excessive use of export subsidies and other special measures to promote exports** may cause a waste of national resources, just as

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*See Balassa, op. cit.
an overactive effort to promote import substitutes, insulated from market forces and prices, has had in the past.*

2. Inflation

The perverse effects of hyperinflation on economic growth are serious and well known. The past experiences of developed countries (e.g., the United Kingdom, Italy, and currently, the United States), as well as that of developing countries (e.g., Argentina, Colombia, Indonesia), provide ample support for this proposition. Hyperinflation results in capital flight, discourages capital inflow, and tends to reduce remittances from abroad (obviously of particular importance to Turkey's balance of payments). If the exchange rate is pegged, or the rate is allowed only to depreciate more slowly than the rate at which prices of tradeable goods and services are inflating, the result of hyperinflation is to stimulate imports and penalize exports. Hyperinflation also tends to discourage internal investment, as well as to divert it to rapidly inflating commodities, such as real estate and precious metals, thereby transferring investors' wealth to the original owners who are more likely to increase consumption. These symptoms have certainly characterized Turkey's economic maladies in the past five years.

While there is a consensus about the foregoing perverse effects of hyperinflation, there is less agreement as well as less supporting evidence on the question of whether "modest" inflation may be consistent with, or even help to advance and sustain, economic development. For example, it is sometimes argued that a modest rate of inflation may help development by raising the rate of (forced) savings, and by validating, and thereby stimulating, investment (to the extent that increases in costs don't take fully or "rationally" into account expectations about future increases in prices).

*As Professor Gulten Kazgan notes in her paper for this conference ("Short-Term and Long-Term Policy Measures for Growth"), the aim should be to lower the real costs of exportables, and import substitutes, so they can genuinely compete, rather than to pick one or the other and insulate it from market forces.
Although the International Monetary Fund and World Bank usually are categorically opposed to this argument, some others, particularly in Latin America, often support it. There is at least some evidence (for example, in the experience of Brazil, Korea, and Taiwan) that a modest rate of price inflation is compatible with sustained economic growth.

My own judgment is closer to, though perhaps not as categorical as, that of the IMF and World Bank. I think the issue relates in part to where one establishes the threshold of "modest" inflation that is compatible with, let alone contributing to, sustained development. Empirically this threshold would seem to lie somewhere between 10 and 15 percent as an annual rate of permissible inflation. This rate is in fact capped in most cases of sustained development in the successfully developing countries. However, even at this threshold, questions arise as to whether such a threshold can be maintained: (a) if "rational" rather than adaptive expectations prevail in the economy; and (b) if monetary policy is, or becomes, accommodating to the rate of inflation. If these conditions exist, the 10-15 percent range may be short-lived. Moderate inflation may escalate to hyperinflation, and an inflation that is "compatible" with sustained growth may become incompatible.

3. Capital Inflow and Foreign Investment

Capital inflow has provided a critical input to the sustained economic performance of the new industrialized countries. For example, in Korea—an economy approximately as large as the economy of Turkey measured in aggregate GNP terms—foreign capital inflow in 1978 amounted to approximately $2.6 billion, over 20 percent of Korea's total export earnings. And the bulk of the capital inflow (about $2.0 billion) was on long-term capital account. I think this pattern is likely to be characteristic of sustained growth in the developing countries.

Different types of capital imports have quite different consequences. Hence, the composition of capital inflow is as important as its magnitude. For example, capital inflow can be
accommodating (i.e., equilibrating the net surpluses or deficits on current account), or it can be autonomous, in response to market incentives. Capital inflow can take the form of short- or medium-term borrowing or program foreign aid (of the type extended in the past by the members of Turkey's OECD consortium), as examples of accommodating inflows. Capital inflows can alternatively take the form of long-term borrowing and foreign direct investment, as examples of autonomous inflows. A useful role can be played by both types of capital inflow. It would be interesting and important to consider the notion of an optimal "balance" between them, depending on the stage of a country's economic development and modernization.

In Brazil, Korea, and Taiwan, for example, the bulk of the capital inflow--about two-thirds or three-quarters--has probably been autonomous and long-term with an initially small component of direct investment that rose substantially as the economy's growth and potentialities were demonstrated.* By contrast, as of the end of 1978, over 60 percent of Turkey's cumulative capital inflow in recent years has been of the accommodating, short- and medium-term type. Of Turkey's total external indebtedness--approximately $13 billion at the end of 1978--more than $7.5 billion was short- and medium-term debt.**

The direct investment component of capital inflow warrants special comment.*** There are important economic and technological

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*In 1967-69, for example, direct investment in Korea averaged only $24 million, or about 5 percent of Korea's annual net borrowing. By 1972-74, annual direct investment reached $172 million, about 24 percent of foreign borrowing. See Anne O. Krueger, The Developmental Role of the Foreign Sector and Aid, Cambridge, 1979, pp. 145-147.


***One of the shortcomings of large macro-econometric simulation models, such as the model developed by Dervis and Robinson for analyzing the foreign exchange gap in the Turkish economy, is their tendency to treat capital inflow as a single variable, without distinguishing the different types, the incentives to which they respond, and the different effects which they have. (See for example, Dervis-Robinson, op. cit., Appendix A, page 9.)
advantages associated with foreign investment, as well as possible political disadvantages that may also be important.

Foreign direct investment (FDI), for example, typically includes as part of the investment package new technology that can usefully be adapted and diffused throughout a newly developing economy. Also, the debt service entailed by FDI tends to be flexible, and related to the performance of the host economy. Consequently, to the extent that capital inflow is in the form of FDI, as well as long-term loans, the economy may be better able to manage its debt service burden, and to keep it within a range of, say, 10 to 15 percent of foreign exchange earnings, rather than the 30 percent or higher figure that currently faces Turkey.

FDI is also typically, though often indirectly, related to increases in exports, especially exports to the home country from which the investment came in the first instance. The increased exports often resulting from FDI typically occur because the foreign investors are able to anticipate and resolve the distribution and marketing problems facing exports to their own markets. Alternatively, these problems may be resolved through specific marketing and licensing agreements with firms in the export markets, rather than through FDI. In either case, the associated know-how can be important. For example, while the Generalized System of Preferences (GSP) of the U.S. Trade Act of 1974 allows imports to the U.S. of over 2,700 products from the developing countries on a duty-free basis, to take practical advantage of GSP requires the distributional and marketing know-how that is apt to be associated with foreign investment, with joint ventures that combine foreign investment with local investment, or with direct marketing and licensing agreements.

The Korean experience is a case in point. During the past decade Korea's rate of real economic growth has been over 9 percent per annum. In the same period, its exports to the United States have grown by a factor of 17, from $237 million in 1968 to $4.1 billion in 1978 in current prices, a factor of over 5 in constant prices, and an
annual rate about twice that of Korea's GNP.* Moreover, contrary to some views, this remarkable expansion has not been due to special access by the Koreans to the U.S. market through tariff preferences or preferential treatment with respect to non-tariff barriers. Among the major explanations for this striking development have been marketing and licensing agreements with foreign firms, a small but rising quantity of American direct foreign investment in Korea, and joint Korean-American enterprises, able to enter and expand distribution in the American market through the marketing know-how and experience associated with these enterprises. This pattern has characterized expanded Korean exports of clothing, luggage, shoes, and electronics. In other words, foreign investment and marketing agreements have been important devices for stimulating exports.

At the same time, risks and disadvantages are also associated with foreign investment. Resentment against foreign economic intrusion may be active, or be activated. Foreign investors may behave with less consideration of local customs and culture than would be desirable. They may favor importing foreign managers rather than training local ones. Governments that are hospitable to FDI may be or become vulnerable targets for charges of foreign influence or subservience. The list of political hazards is long.

Clearly, Turkey has to make its own decisions about where the balance lies between the economic advantages and the political risks and disadvantages associated with FDI.

4. Technological Importation, Adaptation, and Diffusion

Rapidly growing economies, whether newly developing or advanced, are characterized by a high rate of technological progress. This progress can be measured in various ways. The simplest and most frequently used method is to calculate increases in labor productivity, which typically rises at an annual rate of perhaps 5 to 7 percent in rapidly growing developing economies. Actually, labor

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productivity is at best an ambiguous indicator of technological progress, because labor productivity may rise due to increases in the capital-labor ratio without any necessary changes in technological production functions. The latter is more accurately discernible through increases in total factor productivity, rather than the productivity of labor alone. This measure—the ratio between increased real output and an appropriately weighted sum of both capital and labor inputs—also tends to rise dramatically and protractedly in rapidly growing economies, at a rate of about 5 percent per year.*

Needless to say, there are a number of contributors to these calculated advances in technology, as well as myriad problems of accurate measurement. For example, part of the calculated estimates of increased total factor productivity typically results from a shift of factors of production, especially labor, from lower productivity sectors, such as agriculture, to higher productivity sectors in industry. Another part of the productivity gain may result from improvements in human resources, through education and training.

Yet even when these allowances have been made, a substantial part of the productivity gain remains to be attributed to technological advancement: to improved modes of production; to innovation in both what goods and services are produced, and how they are produced; to modernization of management, as well as equipment.

How can developing countries in general and Turkey in particular realize more rapid rates of technological progress?

One way is through direct investment from abroad which, as I have already suggested, typically combines the import of new technology

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*A similar rate seems to apply to both fast-growing developing countries and developed countries, exemplified by Taiwan and Japan, respectively. By contrast, the growth realized by slowly growing countries seems to be fully accounted for by increases in inputs of capital and labor. In these cases, increased labor productivity is realized only by increases in capital-labor ratios, rather than by increases in efficiency. See C. Wolf, R. Gangadharan, and K. C. Han, Industrial Productivity and Economic Growth, Tokyo, 1964. See also E. E. Hagen, The Economics of Development, Homewood, Illinois, 1975, pp. 253-260.
with the investment package. Licensing arrangements may also enable developing countries to import new technology with little or no foreign investment, but with royalty and quality-control provisions built into the agreements.

There exists also a growing market for "unpackaged" technology, for purchasing engineering and management services to collaborate in the design, construction, operation, and training functions associated with the establishment of productive new technology.* Where new technology is bought on the open market, it is important to realize the special nature of what is being acquired. Technology should be thought of as a flow rather than a stock variable; a process that requires continuing adaptation, renovation, and modification if it is to be successful and sustained, rather than a discrete entity which, once purchased, is permanently in place. All too frequently, a "turn-key plant," originally purchased at a high price by a developing country, is poorly maintained, breaks down, or functions at a low rate of capacity, or fails to be replicated and diffused in the host country. Without the necessary environmental support, the result is at best a temporary enclave of modern technology, and at worst a complete waste of scarce national resources.

5. Exports of Services

I have already referred, in the earlier discussion of market orientation, to the role of increased exports in leading economic development in rapidly growing economies. A related, though usually neglected, point concerns the possibly significant opportunities to export services, as a contributor to development. Remittances by Turkish labor working abroad represent one type of services export,

*It should be evident that not all new technology is efficient, in light of its costs. For example, capital-intensive technology, though efficient in developed countries, may not be efficient in developing countries, whose costs of capital are likely to be high relative to labor costs. In developing countries, new technology that is also efficient is likely to be labor-using and capital-saving, in the aggregate, even though the new technology is likely to require new and different capital inputs.
reaching a peak of $1.4 billion in 1974, or more than 90 percent of Turkey's export earnings in that year. The importance of these exports as a contributor to Turkey's development in the 1970s, as well as the serious impact of their decline after 1976, has been much dwelt on and need not be elaborated further.

However, it may be worth pointing out that still higher returns might be realized by Turkey if it were able to combine the export of unskilled and semi-skilled labor, together with management and technological skills, in performing a variety of construction and engineering services abroad. The lucrative experience of Korea in this form of exporting packaged services may be worth study and emulation. Building from a few hundred million dollars in earnings and remittances only four or five years ago from such exports, Korea currently is realizing earnings and remittances of over $4 billion a year from engineering and construction services performed in foreign countries, most notably in the Middle East.

These earnings are equal to about one-third of Korea's foreign exchange earnings from exports of goods.

It would be worth considering whether and to what extent Turkey can expand its foreign exchange earnings in this direction, by building on its currently small volume of packaged and contracted labor exports in the Middle East (e.g., in Libya), rather than its exports of individual workers to Western Europe. Turkey may have advantages in the provision of such contractual services in various Middle Eastern countries, including Saudi Arabia and Kuwait, by virtue of its location and prior experience in the area. In turn, such exports of Turkish construction and engineering services might be a valuable means of augmenting subsequent exports of Turkish goods to these lucrative markets. Finally, tourism should be mentioned as a type of services export with considerable potential. Its dependence on secure conditions of law and order is both obvious and critical.

C. SECURITY DIMENSIONS: RELATIONSHIPS BETWEEN ECONOMIC DEVELOPMENT AND MILITARY DEVELOPMENT

The standard, conventional view of the relationship between
economic development and military development is that they are competing claimants on scarce and fungible resources. The more guns produced or procured, the less butter available or, for that matter, the less machinery, the fewer textile and leather fabricating plants, transportation vehicles, and so on.

Military development, in other words, is likely to divert resources that otherwise would be available for developmental investment or for personal consumption.

This view of the competitive relationship between defense and development is common to neo-classical microeconomics, and to Keynesian macroeconomics. It is the predominant relationship that exists between economic and military development in static, allocative terms, and under macroeconomic conditions that are more or less in equilibrium (i.e., resources are more or less fully employed, political externalities and expectations are assumed to be constant, etc.). It is the predominant relationship that obtains in most developed countries, and in those LDCs that come close to these equilibrium conditions.

However, in the real world, the relationships between military and economic development are decidedly more complex, both in economic and in political terms.

1. Destabilizing Pressures

Economic development typically, and probably inevitably, generates political, social, institutional, and psychological side effects that are profoundly destabilizing, both internally and externally. Aspirations are likely to be stimulated and accelerated beyond even substantial rates of improvement in performance and well being, with a resulting gap between the two that leads to heightened frustration and dissatisfaction. Economic development may disrupt or weaken the stabilizing role of established institutions by making traditional loyalty to family, community, and religion appear less relevant. Tocqueville's well-known conclusion from his study of rural and urban statistics in pre-revolutionary France is pertinent:
... in none of the decades immediately following the Revolution did our national prosperity make such forward strides as in the two preceding it ... It is a singular fact that the steadily increasing prosperity, far from tranquilizing the population, everywhere promoted a spirit of unrest.

In the modern era, the destabilizing internal pressures resulting from economic modernization may be further exacerbated by external influences. In any event, unless the destabilizing effects of development are anticipated and contained, development itself will be impeded or, as in Iran, terminated and reversed. It may be worth recalling our earlier discussion of the political conditions essential for sustained economic development.* In their absence, investment will be discouraged, capital inflow deferred, and inflation aggravated.

The question arises as to how these destabilizing pressures can be contained and controlled. The answer depends on many factors including, but certainly not confined to, the development and proper use of suitable military and paramilitary forces and capabilities. Inappropriate forces, as well as careless, excessive, untimely or otherwise improper use of force, can have markedly perverse effects. Repressive military dictatorships, hostile to economic development as well as to political freedom, may result. It is also true that the absence of suitable military and paramilitary capabilities available for timely and controlled use may lead to interruption and disruption of economic development. Such military capabilities are thus complementary to maintaining and sustaining economic development, rather than conflicting with it.

Sustained economic development can also have external effects that are destabilizing. For example, Korea's development experience is a prize and a provocation that the regime in the North probably envies, and would like to disrupt. From this point of view, a military conflict between the two, in which a North Korean attack on the South is repelled and North Korea is "defeated" locally, but in

*See above pages 2-4.
which South Korea's industrial complex in metropolitan Seoul is severely damaged, would be viewed as a profound loss by the militarily "victorious" South Koreans!

In the Middle East, too, there is a question whether the tremendous wealth of some of the OPEC countries may become coveted by some of their less well-to-do neighbors, and hence a potential source of conflict between them.* Suitable military capabilities can deter such conflicts, or repel or limit them if they occur. It is also true that aggression may be undertaken by states and leaders, in the Middle East as elsewhere, if they believe they have something to gain because opposing military capabilities are weak.

In all of these cases, the development of appropriate military forces can make an important contribution to enable economic progress to continue in the particular countries mentioned. The proposition's validity is not lost, though its complexity is increased, by noting that military forces can also be used to set back economic progress, both internally and externally.

2. Guns, and Butter Too

Viewed in strictly economic terms, the relationships between economic and military development are also more complex than the conventional, competitive view implies.

One hint as to this added complexity was contained in a study by Benoit, which found a significant positive correlation between defense expenditures in 44 less developed countries and their economic growth rates. Interpretation of his surprising results, including the key question of the causal direction that may be involved, is controversial.** However, his findings provide relevant background


**Emile Benoit, "Growth Effects of Defense in Developing Countries," International Development Review, Vol. 14, No. 1, 1972. Some further work by Robert Dorfman raised important questions about Benoit's findings, thereby opening a set of issues which has, surprisingly, been largely ignored in the intervening years. See Dorfman, "A Comment on Professor Benoit's 'Conundrum'," International Development Review, ibid., and Benoit's rejoinder, as well as that of E.E. Hagen, in the same issue.
for a few general comments on the relationships between economic and military development.

If, for example, one starts from a position of initial disequilibrium, certainly not atypical in developing countries, the economy may be operating at a position well short of its hypothetical, production-possibility frontier. Under these circumstances, it is entirely possible to increase military and economic development at the same time; that is, to have more of both guns and butter.

For example, Korea started its period of substantial economic growth in the early 1960's with a large pool of unemployed or underemployed, unskilled, rural labor. Consequently, their conscription brought about little or no loss in national output because the marginal productivity of rural labor was so low. The resulting burden of increased consumption on the Korean economy was actually due more to the limited capacity of governmental fiscal institutions to mobilize resources than it was to an increase in consumption demand, or a reduction in domestic output. In fact, the increased consumption demand arising from these fiscal limitations was offset by U.S. food aid and other defense support assistance, which served to head off inflationary pressures from the demand side.

At the same time, on the supply side, the training of this large body of unskilled labor in basic literacy, disciplined work habits, as well as technical, mechanical and managerial skills, had a profound effect on subsequent development. The result was a major upgrading of human resources through an institutional mechanism that was probably able to realize substantial economies of scale. The human capital formation, as well as at least parts of the physical capital formation accompanying Korea's military development, made, under these conditions, a significant contribution to accelerated economic development without excessive inflation.

In these circumstances, the relationship between economic and military development was, through much of the decade of the 60s and the early 1970s, probably more complementary than competitive. With the onset of nearly full employment of human and fiscal resources in
Korea, the familiar, competitive relationship between military and economic development seems now more likely to be operating.

3. Competition or Complementarity in Turkey

What bearing does this have on the relationship between military and economic development in Turkey? Frankly, I am not sure. Some have argued that the relationship between military and economic development in Turkey under present conditions is predominantly competitive: higher military expenditures divert resources from development, and add to hyperinflation.

On the other hand, there remains a considerable amount of slack in the Turkish labor force, which is still being absorbed by military conscription. Because of demographic factors the unemployed population is increasing and will probably continue to do so (well beyond what the military takes). At least at the lightly skilled level, then, the military probably does not compete for manpower, and, in fact, releases into the civilian population about 200,000 lightly skilled workers each year--men who are certainly better equipped than a poor peasant without military training.

Furthermore, the Turkish military has been relatively inexpensive by Western standards: living conditions for conscripts are traditionally quite minimal; costs per man are low. (The obsolescence of much of the existing military equipment will undoubtedly bring about a change in this respect, because new technology, requiring more sophisticated training and maintenance, will require greater outlays. But this development remains for the future.)

Finally, and most important, the Turkish military has added to the civilian economy, both in human capital at managerial levels and in actual investment in production. In recent years, the growth of private industry and the lag of military salaries have led to a flow of experienced Turkish officers into the higher levels of industrial management. The numbers reported are significant, although substantiating data are not available. This trend is supported by the "up and out" philosophy within the Turkish military, which does not allow high-level officers to stay in grade for long periods of time.
Until recently, the education of military officers was considered better for organization and decisionmaking functions than the education of civilians; this is certainly true for those in the prime age groups currently, although improvements in civilian education and foreign business training may well change that situation in future years. *

In light of the foregoing, it may be worth asking whether other complementarities could be realized between Turkey's military and economic development. For instance, one might want to increase certain types of manpower training in the Turkish military because they benefit the civil economy, either concurrently or in the future. Training in engineering and in management, say, creates skills valuable both in the military and in subsequent civilian employment. Such skills would clearly be of value in the increased export of "packaged" services discussed earlier, in connection with foreign construction and engineering contracts. Or there may be opportunities for the joint military-civilian production of items such as heavy trucks, automotive parts, or component electronics. This approach might provide opportunities to reach levels of output at which economies of scale could be realized, resulting in efficient supply for meeting both civil demand and military demand in Turkey, as well as in the larger NATO military market. The military's investment organization, OYAK, may warrant consideration as a means to this end provided it is obliged to meet competition--domestic or foreign--and thereby to be, or become, efficient.

4. Relative Costs of Labor and Capital

The following table summarizes, at a rough and aggregative level, some data on the 1978 defense efforts of Turkey, Korea, and Taiwan, including their aggregate defense expenditures in recent years, their size, and their outlays per unit of manpower.

* I am indebted to Margaret Krahenbuhl for comments on the relationship between Turkey's military and economic development.
Table 1
SELECTED DATA ON DEFENSE RESOURCES, 1978

<table>
<thead>
<tr>
<th>Item</th>
<th>Turkey</th>
<th>South Korea</th>
<th>Taiwan</th>
</tr>
</thead>
<tbody>
<tr>
<td>GNP (billions $)^a</td>
<td>44.85</td>
<td>46.0</td>
<td>21.1</td>
</tr>
<tr>
<td>Defense expenditures (billions $)^b</td>
<td>2.0</td>
<td>2.59</td>
<td>1.76</td>
</tr>
<tr>
<td>Defense expenditures/ GNP (%)</td>
<td>4.5</td>
<td>5.6</td>
<td>8.3</td>
</tr>
<tr>
<td>Population (millions)</td>
<td>43.21</td>
<td>37.02</td>
<td>17.1^c</td>
</tr>
<tr>
<td>GNP per capita ($)</td>
<td>1,038</td>
<td>1,243</td>
<td>1,234</td>
</tr>
<tr>
<td>Total military forces (thousands)^d</td>
<td>485</td>
<td>642</td>
<td>474</td>
</tr>
<tr>
<td>Army</td>
<td>390</td>
<td>560</td>
<td>330</td>
</tr>
<tr>
<td>Navy</td>
<td>45</td>
<td>52</td>
<td>74^e</td>
</tr>
<tr>
<td>Air Force</td>
<td>50</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Paramilitary</td>
<td>110</td>
<td>1,000</td>
<td>100</td>
</tr>
<tr>
<td>Defense expenditures/ head ($)</td>
<td>46</td>
<td>70</td>
<td>103</td>
</tr>
<tr>
<td>Defense expenditures/ military head ($)</td>
<td>4,124</td>
<td>4,034</td>
<td>3,713</td>
</tr>
</tbody>
</table>

Sources: 
^c CIA, National Basic Intelligence Factbook, January 1979.
^d IISS Military Balance, 1978-79
^e Includes Marines
Although a substantial degree of overlap exists in the military equipment and systems of the three countries (e.g., in tanks, surface-to-surface missiles, anti-tank systems, aircraft, and air-to-air missiles), the differences in their military circumstances and needs are clearly as significant as their similarities.

In countries like Turkey, Korea, and Brazil, the relative costs of labor and capital differ from those prevailing in the United States and Western Europe. These differences should be reflected in the design and structuring of military forces, and in the pursuit of military modernization. This is not an issue of high or low technology. It is, instead, an issue of how one exploits available technological opportunities to arrive at efficient, as well as militarily effective, combinations of equipment and manpower in countries with differing resource endowments and differing factor prices. Just as economic modernization and development in Turkey should be pursued through more labor-intensive modes, so military modernization and development should also be pursued in ways that are more labor-intensive.

Over the past three years Turkish military outlays, in constant lira, have declined. The needs of force modernization for NATO purposes and the changing international environment may require that this trend be reconsidered. Moreover, as I have suggested above, force posture analysis and design should give due weight to the relative prices of capital and labor in evaluating options for force modernization in Turkey and elsewhere. If opportunities remain for complementarities between military development and economic development, they should be exploited. An approach to the enhancement of military capabilities that seeks to adapt advanced technology in ways that are relatively labor-intensive will minimize the conflict between military and economic development.

Albert Wohlstetter and I have had some preliminary discussions about applying this approach to force evaluation and modernization in Turkey. There may indeed be numerous opportunities for employing new technology in more labor-intensive ways; for example, through technologically advanced, but small and light, anti-tank weapons that
are individually operated; and through individually operated surface-to-air missile systems having similar properties.

This is a subject that warrants extensive analysis and investigation.
III. TURKEY'S DEVELOPMENT POLICIES AND PROSPECTS:
CONCLUDING OBSERVATIONS

How does Turkey's development experience and record look in the light of these recipes for sustained development? Others at this Workshop are better equipped than I am to appraise this record. I will offer only a few preliminary and tentative conclusions based on the foregoing discussion.

Concerning the political dimensions, Dan Rustow's excellent paper* vividly portrays the cyclical pattern of Turkish politics over the past two decades: the civil-military oscillations, and the fluctuating fortunes of the Republican Peoples Party and the Justice Party, and their associated coalitions. An essential part of Turkey's policy agenda is clearly the reconciliation of the vitality of Turkish democracy on the one hand, with the requisite degree of political stability that contributes to economic development on the other. I will make a suggestion later that bears on this issue.

What about the economic dimensions? My impressions can be summarized as follows:

1. Concerning market orientation, Turkish development has probably given it far too little scope. This is not an issue of public versus private enterprise. Instead, the issue is whether state economic enterprise can be expected to perform efficiently in the short-run, allocative sense, or effectively in the longer-term, innovational sense, unless it is subject to the discipline and competition of a market test. The rapid and continuing increases in the collective net deficits of the State Economic Enterprises (SEEs), reaching a figure of 25 billion TL in 1978, or something over two percent of the GNP at market prices, provides fairly unambiguous evidence on this point. Further supporting evidence is suggested by the fact that the collective deficits of the SEEs in 1978 augmented

their financial requirements for investment by about 40 percent, rather than providing net revenues to help finance that investment as originally planned.

2. Inflation -- I think there is no argument that Turkey's rate of inflation has far transcended the threshold of "modest" inflation that may be compatible with sustained development.* The perverse effects of hyperinflation in stimulating imports, penalizing exports, and discouraging remittances as well as capital inflow do not need to be belabored. It is also worth noting that the financing of the previously mentioned deficits and investment demands of the SEEEs has provided a powerful push to Turkey's recent hyperinflation.

3. Capital inflow and foreign investment -- By comparison with the pattern of capital inflow that has characterized sustained development elsewhere, Turkey's portfolio carries far too little long-term capital borrowing and direct foreign investment, even when political drawbacks are allowed for.** However, there should be no illusion that there is a queue of foreign investors ready and anxious to invest in the Turkish economy. The crisis coloration of the recent economic picture in Turkey has hardly encouraged such a queue to form, even if Turkish economic policy were congenial to it.

4. Technology import -- As noted earlier, advanced technology can be joined with capital inflow, especially in the form of direct investment, or it can be acquired in "unpackaged" forms on the international market. Whether in one form or the other, Turkey's development planning warrants closer attention to the selective import of appropriate advanced technology.

5. Exports of services -- As suggested earlier, it would seem that there is room for Turkey to combine the export of labor together

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*See above pages 8-9.
** See above pages 9-12.
with management, technology, and Turkish equipment, in construction and engineering services for export. Opportunities for doing so in the Middle East are worth particular attention.

The complex relationships between military development and economic development in Turkey have been too little analyzed or understood, in Turkey as well as in other countries. The two turfs, economic development and military development, have been typically insulated from one another: planning and policy making in one domain typically have been out of touch with these functions in the other. As I have indicated earlier, it is important to consider the linkages between the two: for example, between efficient modes of force modernization, and the relative prices of capital and labor in the Turkish economy; between the demands of the civil economy for trained manpower, and opportunities for providing such training within the military that can be of use in both sectors.

I will conclude with one thought and suggestion that has occurred to me in reviewing the recipes for sustained development discussed earlier, and Turkey's present economic crisis. If it is naive and unworkable, I can only plead the folly of too-recent exposure to the Turkish scene.

There would seem to be a set of economic policy measures so clearly needed to put Turkey on the path of sustained economic development that they should be, or should become, non-controversial. Perhaps the set that meets this criterion is small; certainly, it must be modest in scale. Beyond some limited ambit, controversy is likely to emerge. The set of such indicated policies should include: (a) the pricing of the output of SEEs at, or much closer to, their production costs so as to yield within a reasonably short time net positive, rather than negative, revenues for financing investment
requirements; (b) an alignment of interest rates to reduce and, within a short time, to eliminate, the disparity between the nominal rate (i.e., about 25 percent) and the rate of inflation (60 or 70 percent); and (c) perhaps some form of indexation of remittances to protect them against inflation, or make them less vulnerable to inflation, over a period of, say, 4 or 5 years.

If the premise is valid that such a list, however small, could be accepted as non-controversial, perhaps bipartisan support between the governing Justice Party and the opposition Republican People's Party could be obtained for a concerted and sustained implementation of these measures. With a bipartisan mandate, such implementation might then be managed by the State Planning Organization on a genuinely non-political basis.
IV. EPILOGUE: TURKEY'S RECURRING ECONOMIC CRISSES

In trying to become familiar with Turkey's economic performance over the past two or three decades, I have been puzzled by the chronology of cyclical economic crises recurring at decade intervals: in 1958-1959; again in 1970; and in 1978-79.

Each crisis, and the period of growth preceding it, had some characteristics distinguishing it from the others. For example, the rate of price inflation in the period preceding the 1970 crisis was much below that preceding the 1978-79 crisis; the scale and abrupt diminution of remittances from abroad has been a more significant ingredient in the current crisis than in its predecessors; etc.

Nevertheless, the crises and their antecedents have enough in common to tempt one to look for a general explanation. Each crisis was reflected in a sharply adverse balance of payments position, and rapid depletion of foreign exchange reserves. Each crisis was preceded by a period of apparently rapid industrial growth,* with high rates of investment in capital-intensive, import-substituting industry under the direction of the State Economic Enterprises. Also, the periods preceding each crisis were characterized by sustained increases in imports, with small or much slower increases in exports, and a prevalence of prices only remotely related to real opportunity costs. Government budgetary deficits also figured in each crisis, resulting from the growth of expenditures unaccompanied by equivalent increases in tax revenues. Further, the periods following each successive crisis were characterized by apparently high rates of growth in real GNP and real per-capita GNP: between 1960 and 1966,

*I use the word "apparently" because, in periods of hyperinflation, accompanied by high protective barriers against imports as well as price controls and price subsidies, more than the usual reservations associated with index number comparisons are warranted. Under such conditions, it is likely that the deflators used to arrive at real rates of growth may conceal distortions which make intertemporal comparisons especially unreliable.
real GNP grew at an annual rate of 5.9 percent; 6.7 percent for
1966-73; and 6.4 percent for 1973-78. *

Each of the economic crises, moreover, was accompanied by serious
fissures in Turkey's political structure, as well as international
concerns about the country's prospects: for example, the military
ouster of Menderes in the coup of May 1960; and the forced resignation
of the Demirel government in 1971, under conditions characterized by
military interventionists as "... anarchy, fratricidal strife, and
social and economic unrest."** International concern over Turkey's
political and economic instability stimulated the formation of the
OECD donor consortium after the 1958 crisis, and the expansion of
World Bank lending, as well as other foreign aid, following the 1970
crisis.

How should one explain this pattern of recurring economic crises?
I don't profess to know the answer; but three explanations have
occurred to me. They are not mutually exclusive; all may be beside
the mark.

The first explanation is that a pattern of cyclical highs, and
deep but relatively short-lived lows, is neither as surprising nor as
unhealthy as it may seem. Successful growth and modernization may be
an uneven process, proceeding by forward leaps, retrenchment and
backpedaling, and subsequent forward leaps. Indeed, Schumpeter's
theory of economic development interpreted the history of Western
economic growth in these terms. Economic growth was viewed as the
result of major innovation, followed by spurts of emulation and
diffusion, with a downturn until the next spurt of innovation.

I have some reservations about accepting this interpretation in
Turkey's case. It seems true that Turkey's overall record of economic
accomplishment is not unfavorable. However, several other countries
(e.g., Korea, Taiwan, Mexico, and Brazil), have managed to sustain
much more substantial rates of growth without the frequency and
acuteness of crisis that has characterized Turkey.

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*My use of the term "apparently" here is based on the reasons
mentioned in the preceding footnote.
**See Rustow, op. cit., p. 15.
A second interpretation is that the cyclical economic pattern is itself a reflection of the vitality of political forces in Turkey, trying to acquire more of an expanding economic pie than is available. The result is inflation, conflicting resource allocations, and eventual downturns. For example, the Democratic Party/Justice Party governments have had close ties and obligations to agricultural and commercial groups favoring agricultural subsidies (e.g., in favorable tax treatment of farm income, price supports, subsidized credit), and other programs to boost agricultural income. The Republican Peoples Party, on the other hand, is less aligned with these groups, but follows a tradition of support for the state sector as a social welfare mechanism. Both parties have favored protection of domestic, import-substituting industry, rather than export industry. The combination and accumulation of these demands has produced the recurring cycle of economic crises.

A third explanation, certainly not inconsistent with the second, is that the cyclical pattern of expansion and crisis may be a form of "economic brinksmanship." Perhaps the pressures of Turkish politics are allowed to propel the country to the edge of the economic abyss--more closely to the edge than might otherwise be tolerated--because of a belief that the NATO allies can be relied upon to provide assistance which, in the absence of an emergency, these often-slumbering allies are less likely to do.