

MIGRATION PROCESSES AMONG DEVELOPING COUNTRIES:

THE MIDDLE EAST

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This paper is part of a research project undertaken within the context of the Technology Adaptation Program at the Massachusetts Institute of Technology and is allowed to appear in the Migration and Development Study Group series as a courtesy of the Technology Adaptation Program.

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Massachusetts Institute of Technology
Cambridge, Massachusetts 02139

Revised May 1978

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I. INTRODUCTION:

MIGRATION PROCESSES IN DEVELOPING COUNTRIES

Conventional views of migration in developing countries focus on five types of movements, on the assumption that they represent all possible patterns:¹ rural-urban migration; seasonal movement; unskilled labor in search of employment opportunities; the "brain drain" phenomenon; and the creation of refugees. Each of these patterns represents a particular type of population movement, and empirical evidence serves to sustain this prevailing fivefold conception.²

Almost all developing countries are experiencing rapid cityward movements which have contributed to urbanization problems since the end of the Second World War.³ Seasonal labor within and across national borders has shaped employment patterns in many regions.⁴ The migration of unskilled or semiskilled workers-- such as Mexican migrants in the United States,⁵ Turks and Yugoslavs in Germany and Austria,⁶ Algerians in France,⁷ and so forth-- is often regarded as the dominant pattern of labor movement from poorer countries. The "brain drain," commonly described as pulling skilled labor toward advanced societies, led to a related belief that skilled migration always constitutes a "drain."⁸ Finally, everyone acknowledges the importance of a fifth pattern, namely, political refugees, as those created most dramatically by great conflicts in the Indian sub-continent and in Eastern Europe, Palestine, and elsewhere.⁹

A common characteristic of these patterns of movements-- except

perhaps for refugees-- is that they affect only particular sectors of society, economy, or polity; they are undimensional in the sense of being motivated largely by economic incentives or political ones; and they are seldom central to political performance or economic activities in either sending or receiving communities.¹⁰ In short, popular images of international migration in developing countries still view such movements as largely peripheral to the central issues of political change and national development.¹¹

There is yet another distinctive pattern of migration that differs markedly from the other five patterns and at the same time constitutes a central feature of both polity and economy for donor and recipients alike, namely, labor migration among developing countries. This pattern is exhibited by the new movement of workers in the Middle East and by the underlying political and economic imperatives that sustain this movement.

The purpose of this monograph is to examine recent trends in migration throughout the Middle East, identify the major economic and political implications of this movement, develop a conceptual framework for modeling migration, and isolate the critical policy options for the countries involved. We shall argue that labor migration in the Middle East is generated by recent changes in the political economy of the region, that it transcends narrow demographic concerns, and that it may well shape the political and economic future of the area for many decades to come.

The burden of these arguments rests on the extent of migration, its composition, the differentials in wages and employment opportunities, savings and remittances of migrant workers, government policies for regulating the movement of manpower across territorial boundaries, and official

expectations of the role of migration in development programs. Population movements in the Middle East may well cast a new light on prevailing conceptions of migration and reveal the full dependence of economic and political orders on the nature of labor flows across national boundaries.

II. MIGRATION IN THE MIDDLE EAST

The issue of labor migration in the Middle East has, to date, been largely overlooked by political analysts, economists, and area specialists alike. Political scientists tend to concentrate on the cultural homogeneity of the Arab states, their conflict with Israel, and the dispute over petroleum prices.¹² Economists typically focus on macro-economic performance, on the effects of the new oil prices, or on sectoral problems, for one country or another.¹³ And area specialists have provided descriptively rich analyses of the region but expressed little concern for the apparent implications of the new labor movements.¹⁴ Yet in recent years there has been a marked change in migration trends with attendant national as well as regional ramifications. That migration is characterized by a complex network of flows that is dominated by Egyptian workers in other Arab states.

A brief characterization of migration in the Middle East may serve as an introduction to the political economy of the region and to the policy issues that inevitably arise. The distinctive features of this migration are the following:

First, it is a pattern of flow among developing countries; labor remains within the region, rather than migrating externally.

Second, it is composed neither of skilled nor unskilled labor alone; the entire structure of the labor force is involved in and, in turn, affected by this movement.

Third, it is not permanent in nature, but temporary, generally from one to four years.

Fourth, it is generated and maintained by underlying economic and political forces that create the incentives for movement and the regulations

for sustaining the flows.

Fifth, it is recognized by all parties as an explicit feature of the political economy of the region, whereby both the political and the economic dimensions are given equal weights.

Sixth, these perceptions in policymaking circles are maintained by economic imperatives; the supply and demand for labor generate an underlying rationale that places pressures on policy responses for regulating and facilitating the movement of labor.

Together, these six characteristics of migration in the Middle East generate a pattern that is distinctive to the types of economies in the region. We shall argue that cultural similarities only contribute to these patterns, while the interdependence of economic and political factors shapes the new labor movements and may, in turn, transform both the politics and the economics of the area in ways that can only have profound consequences. The costs and benefits of this migration have been examined elsewhere.¹⁵ Here we focus on characteristic features that bear upon conceptual approaches to the analysis of migration processes.

III. POLITICAL ECONOMY IN THE MIDDLE EAST:
THE DETERMINANTS OF MIGRATION¹⁶

The petroleum crisis of October 1973 has drawn dramatic attention to the differences among the countries of the Middle East in terms of size and wealth.¹⁷ Indeed, the most populous countries are the poorest in natural resources, and the richest countries are smallest in population. In addition, vast differences exist in the level of technological development and manpower characteristics. The largest countries in population size are the most developed in terms of overall knowledge and skills. For the smaller but more wealthy countries, manpower availability is the single most important constraint on economic development. Over the years these differences have contributed to sharp patterns of migration across national boundaries and to the mobility of both skilled and unskilled labor.

To a large extent the Arab Middle East is a closed system, in that demographic characteristics have not been influenced by large-scale out-migration. Almost all movement across national boundaries is within the region and usually of temporary duration. In this context four types of migratory situations can be delineated, each differing according to manpower composition and attendant implications:

1. Countries that export largely skilled or professional labor (Egypt most notably, as well as Lebanon and Jordan);
2. Countries that import a large or critical portion of the labor force, particularly skilled workers (Kuwait, Saudi Arabia, Libya, and the Arab states in the Gulf region);
3. Countries that export relatively unskilled workers (Algeria, predominantly); and

The demand for Egyptian manpower is reinforced further by the long-standing role of Egyptians as mediators between Western technology and Arab requirements. A two-step flow of technology transfer in the Middle East has evolved during the past twenty years, channeling flows from the industrial states to Egypt and from Egypt to the other Arab countries. The brokerage role of Egyptians in technological transfers was reinforced once more by the increased demand for Western technology in the oil-rich states following the rise in petroleum prices.

In addition, some noneconomic factors affect further the demand for Egyptian labor. In the area of manpower Egypt's advantage lies in the cultural similarity that reduces the difficulties of accommodation and adaptation to an alien environment. Although other Arab states import labor from elsewhere, most notably Iran, Pakistan and India, Egyptian labor is clearly more desirable. So, too, the country's traditional role of political leadership in the Middle East is undoubtedly an important sociological consideration contributing to the demand for Egyptian labor. Egypt has long set the lines of regional policy, shaping ideological debates and serving as the hub of communication throughout the Arab world. Closely related is Egypt's position as cultural leader in the region, serving the educational requirements of all other Arab states.

But the flow of manpower is only partly determined by the supply of Egyptians and the demand in other Arab states. Migration has become, for both donor and recipient, an indirect and often inadvertent instrument of foreign policy. Regional politics and migration patterns are inextricably intertwined. Times of poor relations among the Arabs were reflected in the decline of migration; occasional inter-Arab detentes accelerated the

flows. For example, the large-scale migration of Egyptians to Libya during 1969-1973 and again in 1975-1976 coincided with the period of closest Libyan-Egyptian economic and political collaboration. Since 1973 the issue of migrant workers has been used for political leverage by both Egypt and Libya. Periodic conflicts between the two countries have drawn attention to the importance of labor movement for both.

In the Middle East political objectives have long dominated economic priorities and shaped economic policies. Should migration be explicitly regarded as a political weapon, the volume of Egyptian workers in Arab countries could become one of the most serious foreign policy issues for all states in the region.

IV. LABOR MIGRATION AND FOREIGN POLICY¹⁹

The common consensus is that Egypt has not experienced any sizable in-migration or out-migration until the most recent years. The number of foreigners residing in Egypt as recorded in the 1897 census was 112,000. By 1960 census figures reflected a marginal increase to 143,000.²⁰ The number of Egyptian nationals living abroad was similarly few. Following the nationalizations of the Nasser regime, Greeks, Italians, Armenians, Jews, and Egyptians affiliated with the ancien régime left Egypt. In 1965 it was estimated that less than 100,000 were recorded as migrants in that year.²¹ And most of these were working in Arab countries as teachers and professionals.²²

The revolutionary government established in 1952 had viewed migration as an instrument of internal political control. Domestic repression was accompanied by stringent emigration laws. Obtaining an "exit visa" proved to be one of the most difficult attainments of any Egyptian seeking to leave the country. Strong currency controls were instituted in an effort to reduce the outflow of capital. And those familiar with Egyptian internal politics came to view changes in emigration regulations as a reliable barometer of domestic tensions. The most severe strains in domestic politics were between 1961 (the breakup of the union with Syria) and 1967 (the third war with Israel).

The government's policy in controlling migration to the West was to reduce dependence on the United States, Great Britain, and France and to signal greater rapprochement with the Soviet Union and the Communist countries. Migration to the Arab states was also affected by this policy. On the other hand, the other Arab states' suspicion of Nasser's political

motives was reflected in a reluctance to encourage the emigration of Egyptians.

The Sadat regime liberalized domestic politics and, following the 1973 war, proclaimed an "open door" policy. To the Egyptians it signified not only the possibilities of foreign investment in Egypt, but prospects for Egyptian migration abroad. In contrast to emigration restrictions in earlier years, the new Sadat migration policy has become singularly "open."

The fundamental changes in regional politics, characterized by a movement from ideological politics to pragmatic stances and by Egypt's willingness to relinquish a position of dominance in the Arab world, contributed to the reduction in inter-Arab hostilities.²³ In effect, Sadat had argued for an appreciation of the new leverages associated with oil revenues and recognized the consequences of alienating the oil-rich states by pursuing the old Nasser strategy of Egyptian dominance. By accepting, even arguing for, a reduced role in Arab politics, Sadat allayed his neighbors' suspicions and, more important, indirectly reaffirmed Egypt's cultural and political importance to the other states in the region.

This shift in realpolitik has had significant effects upon patterns of migration throughout the region. The demand of other Arab states for skilled manpower could now be met by the outflow of Egyptians without immediate political obstacles being interposed. In short, while the increase in petroleum prices and attendant growth in surplus revenues of the oil-rich states resulted in an immediate growth in demand for skilled Egyptians, the ability of the Sadat government to convince neighboring Arab states of its benign political intents was undoubtedly the most important factor directly responsible for increased migration.

But Egypt has had no concerted migration policy. At most there have been only a series of measures that have indicated the government's willingness to permit emigration. Abolition of the "exit visa" requirements was of great symbolic significance and its practical effects were extensive. Now the decision to migrate has become entirely a matter of individual discretion; there are few political obstacles. In fact, completion of the mandatory military service is the only remaining restriction.

Despite these changes the migration of Egyptians to the other states has never been of great concern to the new government. At most it has been viewed as an indication of good will and a reflection of domestic political liberalization. Nor has there been an appreciation of either the economic or political implications of this migration or of its effects. Even the total numbers involved have not been clear.

But incentives for migration are now different than in the past. Government approval and the development of institutional facilitators have helped destroy previous views of migration. A new conventional wisdom is required to explain sharp changes in behavior. Certainly, an approving government and a supporting environment shaped these changes. But it remains unclear whether the new incentives will result in long-term trends or whether they reflect short-term, pragmatic accommodations to current conditions.

In the past, Egyptians who moved to other Arab lands went largely to Libya and to the Sudan. They were mostly unskilled and represented only a small and unimportant fraction of the labor force. There were also skilled Egyptians working in the Arab Peninsula and the Gulf region for many years, but again, the numbers have been small until recently. For example, in 1965 the census of Kuwait reported 11,021 Egyptians as

compared with 500,000 Kuwaitis. It was not until the war of 1973 that a marked and accelerated increase in Egyptian migration took place. Although precise figures are not available from Egyptian sources, educated guesses of total migrants range from 225,000 to 500,000,²⁴ and possibly as high as one million or 10% of Egypt's total labor force. The 1976 census places this figure at 1.4 million.

Egyptians tend to move for short periods. Existing rules and regulations are such that they reinforce short durations. Should these change, it is likely to be largely in response to economic pressures in Arab states, not to political pressure exerted by the government of Egypt. It is clear that Egyptian manpower comprises the backbone of the educated personnel in the Arab countries of the Gulf area. In addition to the continuation of these trends, unskilled workers have also been migrating to the Gulf. To the extent that such flows persist, they may well constitute a net drain on Egyptian manpower resources at some levels, one that might impact upon the skilled and perhaps the unskilled components of the labor force.

As noted earlier, Egypt has no official migration policy. In effect, the government is promotional in its orientation and even implicitly encouraging. However, discernable migration-controlling policies are apparent in the recipient countries. The posture of the Arab states has been one of dependence upon the Egyptians coupled with caution at times bordering on suspicion, if not hostility. Kuwait, for example, has effectively segregated its citizens from the alien population, and it has developed an intricate system of regulations to safeguard this segregation. To the extent that immediate "solutions" lie in separating the alien work force and preventing

its effective integration into the body politic, a two-class system will be consolidated, leaving the migrant Egyptians essentially politically disadvantaged in their host countries. In short, what the other Arab states will do will inevitably affect the Egyptians. Similarly, Egyptian policies may well have reverberating effects.

V. MODELS OF MIGRATION: A SELECTIVE REVIEW

These observations of labor migration in the Middle East are largely descriptive, pointing out characteristic features and some policy implications. Indeed, much of what is written on migration is descriptive.²⁵ Yet to fully understand the process of migration and identify appropriate policy interventions, it is necessary to develop a formal representation of its characteristic features. There have only been a few efforts to model the movement of population.²⁶ Most are piecemeal, focusing on a single aspect, and do not provide an overall framework for understanding the interdependence between sending and receiving communities. This section reviews ten studies pertaining to models of migration. Our purpose is to draw appropriate lessons for developing countries, taking into account the characteristics of both donors and recipients.

Each of the studies reviewed here yielded specific insights into the nature of migration processes. They are all analyses of cityward movements; almost nothing systematic has been done on interstate migration. Clearly, models of rural-urban migration are only partly relevant to migration among developing countries, but they yield important information regarding the generic process of population movement. The individual contributions of these studies are underlined, to indicate their most useful features.

The point of departure is a survey of research on internal migration in the United States by Michael Greenwood, which reviews the evidence regarding the determinants and consequences of cityward movement.²⁷ Greenwood differentiates between models of gross migration and models

of net migration and synthesizes what has been found with respect to the effects of distance, income, psychic costs of migration, information, and individual characteristics that relate to the decision to migrate. In the review of consequences Greenwood notes the efficiency of market mechanics in redistributing labor resources, and the externalities associated with migration, and highlights the ambiguities in both these respects.

While most efforts to identify the determinants and consequences of migration are in terms of single equation estimates, there is a simultaneity in the process that remains not fully explicated. That issue is raised more centrally in another article in which Greenwood²⁸ criticizes the assumption of many migration models, namely, that although there are variables which influence migration, migration in turn does not have an effect upon these variables. The purpose of this second study is to undertake an empirically based examination of quantitative differences in the parameter estimates of five different models as the effects of migration on socioeconomic and demographic variables are isolated. Although he raises the simultaneity issue as identified in his central question of concern, the estimation procedure employed is ordinary least squares (OLS). The OLS estimates produce biased parameter estimates when simultaneities are known to exist and when there are lagged endogenous variables. Greenwood does not employ such variables, yet does seek to untangle the effects of built-in simultaneities. But by simply recognizing that OLS estimates are biased, Greenwood made important contributions to the development of generic migration models.

A related study of significance in reflecting upon the analytical structure of the migration process is by Theodore Lianos who proposes

a stocks and flows approach to migration.²⁹ The basic argument is that in modeling migration the effort should take into account not only the determinants of the flows but also the determinants of the stocks from which the flows are generated. That perspective assumes the existence of time lags in the labor market which cause the stocks to accumulate before any movement takes place. Lianos posits two types of lags: response lags and information lags. The former is a stock depleting lag, the latter a stock formation lag. The effort is essentially an econometric approach to a dynamic system formulation.

The distinction between stocks and flows is somewhat different from the distinction between movers and nonmovers posited by Peter Morrison.³⁰ Morrison uses a Markov specification for modeling movement, based on the concept that individuals have different thresholds to the decision to migrate. Lianos, on the other hand, assumes implicitly that eventually the entire stock could be depleted and does not recognize differences in the threshold to move.

Of the many migration models focusing on internal movement one effort is particularly relevant because it employs Egyptian data and seeks to identify the determinants of labor migration in Egypt.³¹ This study, also by Greenwood, recognizes the paucity of empirical data on developing countries and seeks to obtain observations from the 1960 census of Egypt for an analysis in sufficient detail as to be comparable to studies on internal migration in the United States. The object is to examine the variables that effect individual decisions to migrate and to estimate the magnitude of the influence of each factor on aggregate labor supply. Greenwood found that distance is an important hindrance to internal

migration, that there is movement from low wage to high wage areas, that movers are attracted to regions with large populations and high urbanization, but that there is also a tendency toward interurban movement.

Also of interest is a study by E. Drettakis that seeks to explain changes in the employment of migrant workers in West Germany from 1961 to 1972.³² The Drettakis analysis tries to explain migration solely as a function of unfilled job vacancies. While limited in its scope, it draws attention to the role of employment opportunity (and related variables) in determining migration.

Bhagwati and Partington's analysis of the "brain drain" issues cited above³³ reviews much of the literature and empirical studies that bear directly on such drains. More general studies of international movements are not emphasized in their survey.

A broader-based attempt to explain migration is proposed by Wilkinson to explain labor migration from Europe to the United States, 1870-1914.³⁴ He focuses on output level of the U.S. and of the sending country, as well as real wage differences between them. Two models are specified, one in which the dependent variable is the equilibrium flow of labor to the U.S. from the country of origin, and the second in which the dependent variable is normalized with respect to the population of the whole country. These variations have direct relevance to migration in the Middle East since the population levels of sending and receiving countries are substantially different, as is the directional equilibrium flow of labor.

A human capital perspective is adopted by Comay, who focuses on migration of professionals.³⁵ The specific application is with respect to the migration of engineers and scientists to Canada from the United

States. The model focuses on the individual decisions to migrate. Migration itself is modeled as an investment which the individual seeks to maximize in the country of origin. The core of the specification comprises expected costs, expected benefits, the discount rate, and the lifetime earning span foreseen at each age. That specification is then reformulated in two forms, one simply additive, and one representing the decision to move wherein the probability of migrating is a function of employment opportunity in the United States, salary differentials, expected U.S. salary, other composite factors, and a random error term. This study draws upon earlier work which indicated that, among professionals only destination employment opportunities are significant.

Finally, there are two specific contributions by Ruth Fabricant that are worthy of emphasis.³⁶ She distinguishes between the supply and demand for migrants and specifies wage rates as the adjustment mechanism. Then she formulated the obstacles to migration in terms of a barrier function. Since many of the obstacles to migration are related to the rules and regulations that governments impose, this conception of "barrier" may be a useful way of formally representing the role of government.

This review of migration models is not exhaustive by any means. But it focuses explicitly on those studies that are directly relevant to the development of a generic model of population movement among developing countries. These studies provide important clues for modeling both the structure and process of migration. The clues are building blocks for an analytical specification of labor movements across national boundaries. Since the referent world to be considered, the Middle East, is a natural laboratory of differentials in demographic, economic, and social characteristics, it will be possible to investigate explicitly the

effects of different factors cited in the literature and their significance as determinants (or consequences) of migration.

VI. MODELING MIGRATION / AMONG DEVELOPING COUNTRIES:
TOWARD A GENERIC REPRESENTATION

The purpose of developing a quantifiable model of population movement among developing countries is to provide a framework in which to incorporate those economic, demographic, and policy variables critical in shaping both the individual decision to migrate and the macro-societal adjustments to such decisions. It should also allow for a representation of the attendant interdependence between donor and recipient countries.

Modeling migration is, in our view, important for four reasons:

1. To understand the overall characteristic features of population movement among developing countries;
2. To delineate what interventions are most relevant to obtain desired outcomes;
3. To identify where policy interventions might be appropriate;
4. To determine the structure of political and economic interdependence between sending and receiving countries. The more complex that interdependence, the greater the need for conceptual assistance in clarifying its critical features.

Figure 1 represents a set of hypotheses about the process of migration among developing countries-- from both rural and urban areas to foreign destinations. The figure depicts generic processes and specifies linkages among variables that can be tested against empirical data. Note that it incorporates the major clues provided by the ten models reviewed, namely: determinants and consequences of movements; stocks and flows; simultaneity and attendant interdependence; wage differentials; employment opportunities; human capital; adjustment mechanisms; and

various barriers to migration.

For illustrative purposes the hypotheses depicted in Figure 1 draw upon movements between Egypt and Kuwait, as highlighting the most significant features of migration among countries of the Middle East. The nature and extent of labor migration between these two countries dramatizes its importance for both donor and recipient.

The contribution of Figure 1 is that it specifies within the same framework both the major determinants and the consequences of migration. This formulation enables us to trace the role and characteristics of both donor and recipient.

Figure 1 incorporates the hypothesis that the characteristics of the donor country contribute in determining the potential migrants (the stock variable), while the characteristics of the recipient country shape the flow of labor. At the same time a barrier function is incorporated to reflect the possibility that actual migration will be tempered and controlled by governmental interventions.

The inclusion of both rural and urban sources of migrants is designed to capture the empirical observation that in the Middle East migration is, in some cases, a two-step flow-- from rural to urban areas and then from urban areas to foreign destinations. However, since Egyptian fellahin have been observed in the labor markets of Libya and the Sudan, the hypothesis that flows may exist between rural areas and foreign locations cannot go untested. The inclusion of the rural work force as a possible determinant of the stock of potential migrants is designed to enable testing of the impact of the rural-foreign flow, important in some countries of the Middle East.

FIGURE I:

THE MIGRATION PROCESS

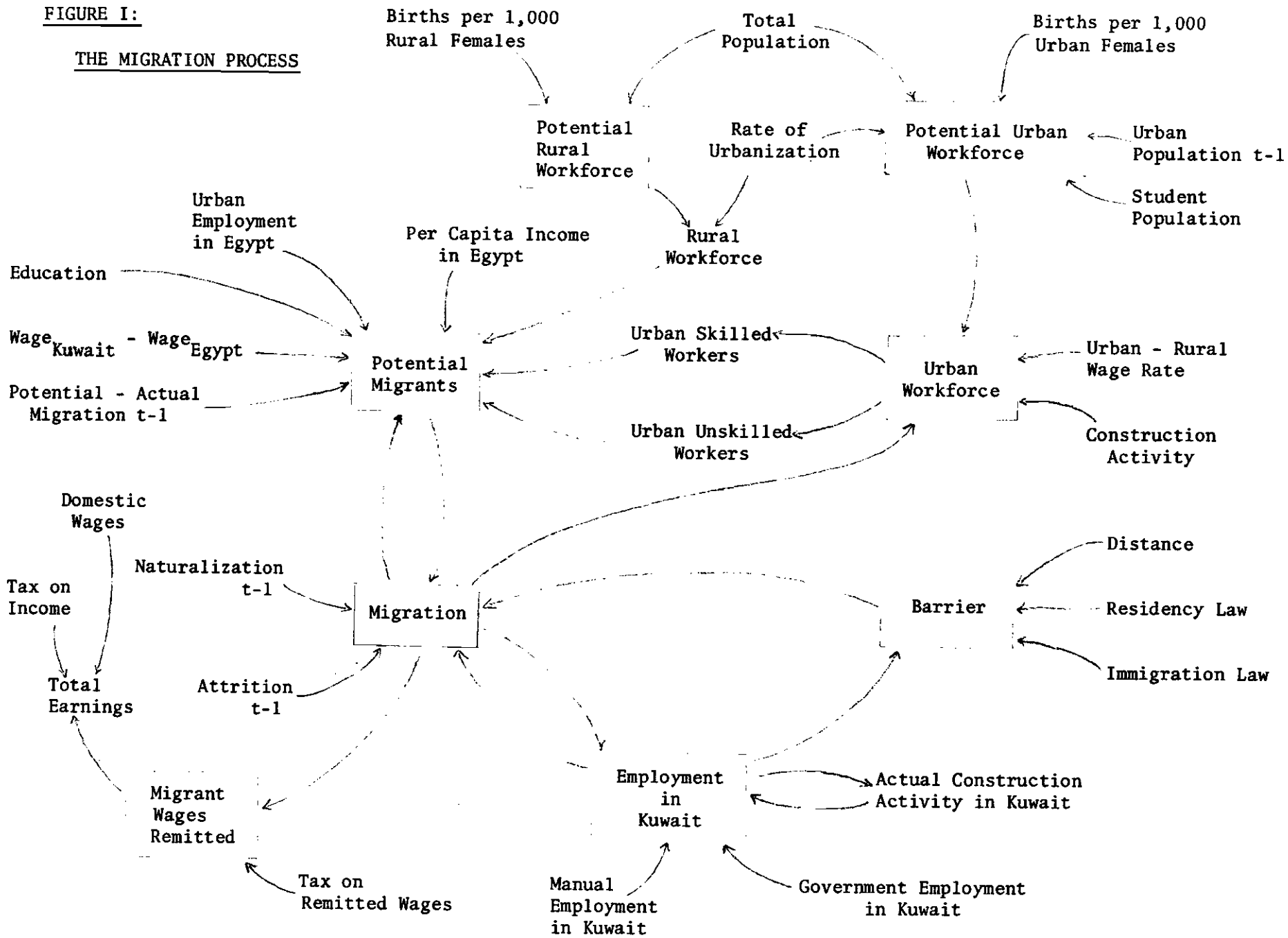


Figure 1 is in the nature of a research agenda: we intend to estimate the parameters of a system of simultaneous equations following the initial specifications in the Figure. The jointly dependent variables are noted in boxes, while the independent and exogenous variables are simply listed at the tail of the arrows. The Figure is presented here as an illustration of the characteristics of the model of the process of migration which this proposed study seeks to develop and employ, as a framework for evaluating the gains and losses to donor and recipient of the movement of labor across national boundaries. The specific linkages in Figure 1 should be interpreted as initial hypotheses. This specification of population movement is only a first step toward formal modeling.

We propose to obtain empirical estimates of the coefficients through the use of regression analysis. Since our purpose is to capture some of the simultaneity in the process, and since our specifications include lagged endogenous variables, ordinary least squares will not provide consistent estimates of the "true" parameters. Employing two-stage least squares in conjunction with generalized least squares (to correct for the bias in the parameters introduced by serial correlation in the disturbances) will provide the most consistent estimates of the coefficients.³⁷

The migration process depicted in Figure 1 is thus presented here as an illustration of the type of structure that is suggested by synthesis from the relevant literature and with direct applicability to the laboratory of the Middle East. At this stage we cannot justify strongly any single or specific link in that figure. Each is predicted on an underlying empirical or theoretical rationale. The modeling task is to test the validity and reliability of these linkages, respecify the equations as appropriate, and

reestimate the entire structure following each respecification. Changes in one component of the model may (and often will) generate (or reveal) changes in other components. For this reason we propose to estimate the parameters of the entire structure and not, as is more common in the literature, test for the statistical association between two (or more) variables or examine single equation relationships. In the empirical context of the Middle East, interstate migration is a highly interactive process in that characteristics of donor and recipient jointly shape the flow of labor across national boundaries.

There are some basic conceptual and empirical difficulties that necessarily arise in the course of estimating the parameters of such a model. No one has as yet satisfactorily defined the "potential" migrants (or as is more commonly the case, the "stock"). Since in actuality it is not the entire labor force that is disposed to move at any point in time but a subset thereof, defining that subset is, in itself, an important conceptual and methodological problem. We propose to proceed by elimination, that is, isolating those characteristics of the labor force that will predispose individuals not to migrate. Age is one such attribute. Members of the labor force who are either too old or too young will not move. In traditional Moslem societies older sons will not move, nor will an only child. But beyond this simplistic distinction, the delineation of potential migrants from the entire stock of available labor is a problem of no small consequence.

Other difficulties pertain to data availability. For most of the variables in Figure 1 we presently have time series observations for at least the past twenty years. However, migrant remittances will pose a serious problem. In most of the countries of the Middle East it is only

very recently that governments have developed institutions for monitoring the flow of remittances. It is also difficult to distinguish remittances from other capital flows or from flows under import systems, such as the "own import" system in Egypt (whereby individuals can import consumption and capital goods from foreign earnings, bypassing any government regulations providing such imports do not exceed L.E. 5000). To develop empirical series for remittances will necessitate looking closely at data from the Central Banks, the Ministries of Economy and of Finance, and other government agencies.

VII. FROM MODELING TO POLICY ANALYSIS

Within the context of Figure 1 one can identify a variety of policy interventions that could affect the flow of labor across national boundaries. Indeed, each of the independent variables can be the target of government policies. The most appropriate representations of policy interventions are those located close to the barrier function, where governments have the most direct leverage on population movement.

The five patterns of migration described in the introduction of this paper provide informative, though marginally useful, clues for generating an initial assessment of possible policy interventions on both sides of the flows. Migration processes among developing countries are sufficiently distinctive that policy "importation"-- from other patterns of migration-- can only be a point of departure in any assessment of policy options.

Typically, governments have found it difficult to regulate rural-urban migration. The incentives for movement virtually all work in the direction of the city. Therefore, unless concerted efforts are made to enhance employment opportunities in rural areas or to equalize wages between rural and urban centers, cityward movements in the Middle East will not abate and may continue to be a prime source of labor for foreign destinations. Efforts to develop alternative urban centers and to "redistribute" population are still in the blueprint stage.

The migration of unskilled and semiskilled workers (e.g., Mexicans, Turks, Yugoslavs, Algerians, and Portuguese) provides better insights into sets of appropriate policy interventions for regulating population movements among developing countries. The Turks have opted for a

"rotating" principle, whereby groups of workers are sent to Europe and are expected to return.³⁸ They are viewed as "guests" by the receiving country. The Algerians have opted for a similar approach but sought to integrate their migration policies more closely with their overall relations with France.³⁹

To a large extent the present patterns of policy intervention in the Middle East reveal similar features. Egypt officially supplies certain categories of workers to other Arab countries and in turn contributes to the setting of conditions for their employment. Egyptian nationals are viewed as "guests," in accord with the Arab predisposition to regard the citizens of the individual states as "brothers."

Policy interventions for regulating illegal migration are less relevant to the Middle East today since most movements are legal⁴⁰ and those that are not remain unpublicized lest they embarrass any of the Arab governments. Many states in the region maintain officially that there ought not be any barriers to migration among Arab states. In actual fact there can be strong barriers, most notably in Gulf countries.

Finally, there are the responses to refugees. Since the Palestinians constitute a high portion of the total population of Kuwait, Jordan, and to a lesser extent, Lebanon, the refugee issue has always been of concern to all Arab governments. Assimilation has been a policy only in Jordan and Kuwait. In other countries the Palestinians are considered primarily as nationals in their own right. At the present time the predisposition in the Middle East is not to distinguish between policies designed to regulate the movements of labor and those directed specifically to regulating the flow of refugees. The disposition now, unlike the early 1950's, is to

focus on nationals and view the Palestinians as nationals of a state to be.

In the Middle East migration typically plays a central role in the development plans of countries that depend heavily on imported labor. Even prior to the increase in oil prices in October 1973, these countries had placed strong emphasis on migration-related policies. For example, the First Five-Year Plan of Kuwait (1967/68-1971/72) stressed the need for regulation of migrant workers and for the development of guidelines covering general population issues,⁴¹ thus legitimizing the government's concern for the political and economic implications of its continued reliance on migrants. Of the eleven goals specified in the plan four were concerned directly with population and migration:

1. Increasing the Kuwaiti population to a majority status;
2. Assuring a Kuwaiti majority in the labor force;
3. Creating employment opportunities and expanding the size of the citizen labor force;
4. Restricting the use of migrant labor except in highly skilled and technical vocations, to be balanced by the exit of equivalent numbers of unskilled foreign workers.

At the same time official Kuwaiti government policy was to provide incentives for its young citizens to study abroad so as to eventually constitute the required Kuwaiti majority in professional vocations. Since the end of the first Plan period the government has regulated further the flow of skilled manpower. As long as Kuwaiti salary scales are several times that of other Arab states, as long as the government seeks to collaborate economically and politically with its neighbors, and

as long as it tries to grow faster economically than its own population increase will permit, a policy of reducing the net inflow of migrant workers is unlikely. Partial restrictions may well evolve, and these may be specific by country of origin, but so far restrictive policies have not been of this kind.

Planners in Kuwait are intuitively aware of the social, economic, and political implications of the demographic structure of the country, and good statistics are kept, yet there is an insufficient appreciation of the effects of restrictive or, alternatively, expansionary migration policies. Indeed, the contradiction between the country's avowed commitment of resources for Arab development⁴² and the restriction of Arab workers is not fully understood. The persistence of conflicting objectives, such as rapid economic development and manpower self-sufficiency, highlights the problems generated by alien workers in Kuwait. The Kuwaiti predicament is shared by other Arab countries that depend upon citizens of other countries for their professional manpower.

For the donor countries, most notably Egypt, migration has traditionally been overlooked as an issue in development planning. At least four sets of comprehensive plans have been formulated since Egypt adopted planning as an instrument for defining economic priorities and development objectives,⁴³ yet none refers to migration; and only the last plan draws attention to the importance of demographic factors in the country's development. Aside from an occasional recognition of the potential importance of Egypt's manpower as a national resource, its workers abroad have usually been ignored. There are signs of change:⁴⁴ in 1975 and 1976, the government signed labor protocols with Libya and Qatar governing conditions for the exportation of Egyptian labor. But aside from these two

agreements and a set of ad hoc procedures with other Arab countries Egypt still has no concerted migration policy.

The growing interdependence among the countries of the Middle East, created in large part by the increasing flow of Egyptian labor, has created a situation where the search for mutually beneficial policies is becoming more salient. From the donor's perspective at least four policy options emerge, with varying implications for the recipients.

First is a policy of levying a tax on individual migrant earnings. This possibility has been suggested in various circles, but never seriously entertained either in the Middle East or elsewhere. The difficulties of raising and collecting such a tax are extensive, given the problems of control, monitoring migrant earnings, and devising means of extraction. Furthermore, such a tax would produce the same macro-economic effects as capturing remittances.

Second is a bilateral state-based agreement which would entail an overall charge from the Egyptian government to recipient countries for the employment of Egyptian manpower. That charge would depend upon the composition of migration, its duration, the tax structure of the recipient country, and possibly the value of remittances.

A third possibility is to develop a consortium of major interests or parties participating in the flow of manpower, by industry, activity, or occupation, and devising exchange policies to be agreed upon, and implemented, at the state level.

A fourth policy option is to formulate a barrier function on the basis of international rules and regulations that establish state-based contributions to manpower development on a regional basis. In this event

all participating countries in the Middle East will become involved in devising the means and procedure of exchange.

Options two, three, and four place the migration issue in an interdependence context and seek to employ labor movements as the focal point of an overall exchange among the countries of the Middle East. That exchange would be designed to enable each country to capitalize on its respective characteristics in the broad political economy of the region. The guiding principle for defining the nature of such an exchange is the following: to find a procedure for channeling national resources to support services that benefit the region directly or indirectly without jeopardizing national objectives. The underlying precept is to tax human capital movement and to organize physical capital flows so as to affect and/or maintain human capital flows. (Figure 1 thus represents only that part of an overall exchange framework that pertains to manpower flows.)

From the donor's point of view the major incentive for such an exchange perspective-- as opposed to a policy taxing the earnings of individual migrants or a policy of ignoring the migrants-- is to protect its position of labor advantage. The importance of Egyptian knowledge and skills in the area may be of short duration unless attendant institutions are expanded effectively. Unless that role is protected and utilized as a national resource, its usefulness for developmental purposes will be short-lived.

From the perspective of the other Arab countries, the major incentive for such an exchange is the possibility of encouraging short- and long-term skill redistribution in the region. Planning for technological change may be facilitated with the assurance of orderly access to regional skills.

Such an exchange will facilitate the ordered channeling of the existing two-step flow of the transfer of technology in the Middle East -- from the advanced industrial states to Egypt and from Egypt to other Arab countries -- and will lead to more rational approaches to the utilization of existing skills for national growth and regional development.

VIII. CONCLUSION

Labor migration in the Middle East is creating new bargaining power for all countries involved. How that power is used will have not only national implications, but regional implications as well. To fully appreciate the demands thus placed upon all governments it is important to understand the characteristic features of such movements, the interdependence imbedded in the structure of migration among these countries, and the basic policy options available to donors and recipients.

Migration among the countries of the Middle East is created by the political economy of the region and, in turn, will generate greater interdependence among sending and receiving communities. The policy options adopted by each must be coordinated such that the costs and benefits of population movement will be equitably distributed. The exchanges are complex, and any unilateral interventions may result in greater costs than benefits. All countries in the Middle East are beginning to appreciate the prospects of common gain from regulated access to the region's labor force. This appreciation is a necessary step toward the development of a more viable exchange.

Notes

1. This judgment is based on works included in Robert Berrier and Thomas Wolf, Internal Migration: A Selected Bibliography (Cambridge, Mass.: MIT Center for International Studies, Migration and Development Study Group Monograph, 1975) and on a search for entries on migration in the NASIC computerized library retrieval system, which includes the data base of the Smithsonian Science Information Exchange, prepublication information, and worldwide journal coverage in social science and humanities subjects. This search was undertaken at MIT, then cross-checked with the library of the Carolina Population Center, University of North Carolina.
2. An excellent review of migration patterns and related analyses was prepared by the United Nations, Department of Economic and Social Affairs, The Determinants and Consequences of Population Trends: New Summary of Findings on Interaction of Demographic, Economic and Social Factors (New York: United Nations, 1973), esp. Volume I.
3. Joan M. Nelson, Migrants, Urban Poverty, and Instability in Developing Nations (Cambridge, Mass.: Center for International Affairs, Harvard University, 1969); Joan M. Nelson, Temporary Versus Permanent Cityward Migration: Causes and Consequences (Cambridge, Mass.: MIT Center for International Studies, Migration and Development Study Group Monograph, 1976); Wayne A. Cornelius, Jr., "The Political Sociology of Cityward Migration in Latin America: Toward Empirical Theory," in Francine F. Rabinovitz and Felicity

M. Trueblood (eds.), Latin American Urban Research, Volume I (Beverly Hills, Calif.: Sage Publications, 1971), pp. 95-147; Wayne A. Cornelius, Jr., "The Cityward Movement: Some Political Implications," in Douglas A. Chalmers (ed.), Changing Latin America: New Interpretations of Its Politics and Society, Proceedings of the Academy of Political Science, Volume 30 (1972), pp. 27-41; among others.

4. For example, see P.J. Imperato, "Nomads of the Niger," Natural History, 81: 10 (1972), pp. 60-69, 78-79.
5. Wayne A. Cornelius, Jr., Illegal Mexican Migration to the United States: Recent Research Findings, Policy Implications, and Research Priorities (Cambridge, Mass.: MIT Center for International Studies, Migration and Development Study Group Monograph, 1977).
6. Nermin Abadan-Unat (ed.), Turkish Migration (Leiden, the Netherlands: E.J. Brill, 1974); P. Kliner, "The Theoretical Models for Empirical Sociological Research of International Migration, Some Yugoslav Papers," presented at the 8th World Congress of the International Sociological Association, Ljubljana, 1974; Ursula Mehrlander, "Friction and Conflict Resulting from the 'Human Resource' Problem in Europe" (Boston: Contribution to the Conference on Conflict and the Emerging International System, May 4-6, 1977); Suzanne Paine, Exporting Workers: The Turkish Case (Cambridge: Cambridge University Press, 1974); Oli Hawrylyshyn, Is Ethnicity a Barrier to Migration? The Yugoslav Experience (Cambridge, Mass.: MIT Center for International Studies, Migration and Development Study Group Monograph, 1976).

7. Stephen Adler, Migration and International Relations: The Case of France and Algeria (Cambridge, Mass.: MIT Center for International Studies, Migration and Development Study Group Monograph, 1977).
8. Jagdish N. Bhagwati and Martin Partington (eds.), Taxing the Brain Drain: A Proposal (Amsterdam: North Holland Publishing Company, 1976); and Walter Adams (ed.), The Brain Drain (New York: MacMillan, 1970).
9. See, for example, Table 8-6, entitled, "Refugee Population of the World by Area of Asylum and Origin, 1965-66," in William Petersen, Population, 2nd ed. (London: MacMillan, 1969), pp. 284-285; H. Barakat, "Palestinian Refugees -- Uprooted Community Seeking Repatriation," International Migration Review, 7:2 (Summer 1973), pp. 147-161.
10. Yugoslav migration is a notable exception. Thus these generalizations.
11. Population movement is seldom, if ever, treated in texts on political development or on economic development. The Department of Political Science at MIT offers a graduate specialization in Political Demography as part of the regular degree program. In that context students are exposed to research and analysis of population movements. But this is an unusual option in graduate programs in Political Science.
12. See the essays in Paul Y. Hammond and Sidney Alexander (eds.), Political Dynamics in the Middle East (New York: American Elsevier, 1972) as illustrative of the political scientist's perspectives

on the Middle East.

13. For example, Robert Mabro and Samir Radwan, The Industrialization of Egypt 1939-1973 (Oxford: Clarendon Press, 1976); Charles A. Cooper and Sidney S. Alexander (eds.), Economic Development and Population Growth in the Middle East (New York: American Elsevier, 1972); among others are good illustrations of the economists' disregard for labor migration in the region.
14. Peter Manfield, The Middle East: A Political and Economic Survey, 4th ed. (London: Oxford University Press, 1973); Elizabeth Monroe, The Changing Balance of Power in the Persian Gulf (New York: American Universities Field Staff, 1972). A notable exception is Richard J. Ward, "The Long Run Employment Prospects for Middle East Labor," Middle East Journal, 24:2 (Spring 1970), pp. 147-162.
15. This section is adapted from Nazli Choucri, The New Migration in the Middle East: A Problem for Whom? (Cambridge, Mass.: MIT Center for International Studies, Migration and Development Study Group Monograph, 1977).
16. See Choucri, The New Migration in the Middle East: A Problem for Whom?
17. For a survey and analysis of these changes see Nazli Choucri, International Politics of Energy Interdependence: The Case of Petroleum (Lexington, Mass.: D.C. Heath, 1976), esp. Ch. 4.
18. The largest noncitizen group in Kuwait is composed of Jordanians and Palestinians. Kuwaiti authorities view these two groups as one, given the composition of Jordan and difficulties in differentiating among Palestinian citizens of Jordan and Jordanian citizens.

- The census of 1970 lists Jordanians and Palestinians as comprising 20% of the total population, an increase from the 16.6% enumeration in the 1965 census. The next two groups are Iraqis and Iranians. The former constituted 5.5% of the population in 1965 and decreased slightly to 5.3% by the 1970 record. The latter also decreased between 1965 and 1970, from 6.6% to 5.3%. At the same time the increase of Egyptians was from 2.4% to 4.1%. This change, though small, was prior to the marked growth of migration to Kuwait following the 1973 war. The growth in Egyptian migration in conjunction with the decline in Iraqi and Iranian migration is likely to place Egyptians in a more dominant position in Kuwait.
19. This section is adopted from Choucri, The New Migration in the Middle East: A Problem for Whom?
 20. M.A. El-Badry, "Trends in the Components of Population Growth in the Arab Countries of the Middle East: A Survey of Present Information," Demography, 2 (1965), pp. 140-186.
 21. A. Gritly, Population and Economic Resources in U.A.R. (Cairo, 1962), cited in El-Badry, "Trends in the Components of Population Growth in the Arab Countries of the Middle East," p. 158.
 22. Although this is a common view, iterated also by El-Badry in "Trends in the Components of Population Growth in the Arab Countries of the Middle East," pp. 140-186, there has been some employment of relatively unskilled labor in Libya.
 23. See Choucri, International Politics of Energy Interdependence; for a comparative analysis of changes in inter-Arab conflicts see Ijaz Gilani, "The Politics of Integration and Disintegration: The Development of Pragmatic Arabism from Khartoum to Rabat (1967-74). A Study

of Inter-Arab Relations" (Ph.D. dissertation, MIT Department of Political Science, 1977).

24. The Economist (November 13, 1976), p. 85
25. Berrier and Wolf, Internal Migration.
26. One of the most noteworthy efforts is Michael P. Todaro, "A Model of Labor Migration and Urban Unemployment in Less Developed Countries," American Economic Review, 59:1 (March 1969), pp. 138-148; see Janet Rothenberg Pack, "Models of Population Movement and Urban Policy," IEEE Transactions on Systems, Man, and Cybernetics, SMC-2:2 (April 1972), pp. 191-195, which reviews critically the migration specification in J.W. Forrester, Urban Dynamics (Cambridge, Mass.: MIT Press, 1969) and subsequent works by scholars in this tradition. Perspectives on migration all have their origins in the "push" and "pull" concepts and attendant formalizations that owe a debt to Samuel Stouffer. See Samuel A. Stouffer, "Intervening Opportunities: A Theory Relating Mobility to Distance," American Sociological Review, 5:6 (December 1940), pp. 845-867; for a review of these concepts see W.H. Hutt, "Immigration Under Economic Freedom," Economic Issues in Immigration, Institute of Economic Affairs, Readings in Political Economy, No. 5 (1970), pp. 17-44.
27. Michael Greenwood, "Research on Internal Migration in the United States: A survey," Journal of Economic Literature, 13:2 (June 1975), pp. 397-433.
28. Michael Greenwood, "Simultaneity Bias in Migration Models: An Empirical Examination," Demography, 12:3 (August 1975), pp. 519-536.

29. Theodore P. Lianos, "A Stocks and Flows Approach to Migration," American Journal of Agricultural Economics, 52:3 (August 1970), pp. 442-443.
30. Peter Morrison, "Theoretical Issues in the Design of Population Mobility Models," Environment and Planning, 5:1 (1973), pp. 125-134.
31. Michael Greenwood, "The Determinants of Labor Migration in Egypt," Journal of Regional Science, 9:2 (1969), pp. 283-290.
32. E.G. Drettakis, "The Employment of Migrant Workers in West Germany 1961-1972: An Econometric Analysis," Applied Economics, 8(1976), pp. 11-18.
33. See Bhagwati and Partington (eds.), Taxing the Brain Drain.
34. Maurice Wilkinson, "European Migration to the United States: An Econometric Analysis of Aggregate Labor Supply and Demand," Review of Economics and Statistics, 52:3 (August 1970), pp. 272-279.
35. Yochanan Comay, "Migration of Professionals: An Empirical Analysis," Canadian Journal of Economics, 5:3 (August 1972), pp. 419-429.
36. Ruth A. Fabricant, "An Expectational Model of Migration," Journal of Regional Science, 10:1 (1970), pp. 13-24.
37. A discussion of these methodological issues and the algorithms involved is presented in Appendix B (entitled "Methodology") of Nazli Choucri and Robert C. North, Nations in Conflict: National Growth and International Violence (San Francisco: W.H. Freeman, 1975), pp. 302-322. This appendix is a detailed survey of methodological problems in developing and estimating the parameters of a system of simultaneous equations, and a synthesis of the relevant issues in econometrics as they apply to political and social inquiry.

38. Ijaz Gilani, "International Migration: The Issue, the Immigration and Emigration Strategies and Some Lessons for an Egyptian Migration Policy" (MIT Technology Adaptation Program, 1977).
39. Adler, Migration and International Relations.
40. Cornelius, Illegal Mexican Migration to the United States.
41. Information available in the West on Kuwait's development programs is sketchy. The following observations draw upon Edmund Y. Asfour, "Prospects and Problems of Economic Development of Saudi Arabia, Kuwait, and the Gulf Principalities," in Charles A. Cooper and Sidney S. Alexander (eds.), Economic Development and Population Growth in the Middle East (New York: American Elsevier, 1972), pp. 385-387; Ragaei El Mallakh, Economic Development and Regional Cooperation: Kuwait (Chicago: University of Chicago Press, 1968), pp. 124-132; UN, United Nations Economic and Social Office in Beirut, "Plan Formulation and Development in Kuwait," in UN-UESOB. Studies on Selected Development Problems in Various Countries in the Middle East, 1968, pp. 11-24; Ragaei El Mallakh, "Planning in a Capital Surplus Economy: Kuwait," Land Economics, November 1966, pp. 425-440.
42. Choucri, International Politics of Energy Interdependence, Chapters 4,5.
43. It is unclear precisely how many plans Egypt has had. See Choucri, The New Migration in the Middle East: Problem for Whom? for a review of the evidence.
44. Nazli Choucri and R.S. Eckaus, "Interactions of Economic and Political Change: the Egyptian Case" (MIT Technology Adaptation Program, 1977).