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Migration, remittances and economic development in Yemen Arab Republic

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Migration, remittances and economic development
in Yemen Arab Republic

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by

Mahmoud Ali Al-Iriani

A Thesis Submitted to the
Graduate Faculty in Partial Fulfillment of the
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Signatures have been redacted for privacy

Iowa State University
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1. INTRODUCTION

1.1 Preamble

Population movements are by no means a new phenomenon to the history of mankind. Since time immemorial, human history has experienced movements of people from one region to another. Political, social, religious and economic motives have all propelled population movements for thousands of years.

There are some factors that distinguish modern international migration from the population movements that characterized earlier ages. Modern migration has taken new dimensions since the idea of the nation-state took place in Europe during the Industrial Revolution in the 17th century. This new development spread to the rest of the world and more restrictions on migration between different countries emerged. While settler migration used to be the dominant form of international migration, it has decreased in importance except for some countries, like the United States, Canada and Australia, in which settler migration is still taking place to some extent. In contrast, refugee movements and temporary labor migration are the most important contemporary forms of international migration.

During the 18th century and up to the late 1950s, settler migration from Europe and other regions to the New World was dominant. Attractive economic opportunities in the Americas, New Zealand and Australia and depressed ones at home induced large scale settler migration to the new

continents. The famine-induced Irish migration in the nineteenth century is an extreme example of mass migration from Europe to the New World.

Refugee movements have always been a characteristic of the human life. Nevertheless, mass refugee movements from regions of political instability, wars, and natural disasters are increasingly attracting more concern of the international community. An estimated number of 8 to 14 million persons are refugees in countries other than their origin (Kritz et al., 1981). The bulk of contemporary refugee migration occurs in the developing countries of Africa, Asia, and Latin America.

International temporary labor migration is recently a major component of migratory movements between countries. It involves movements of workers from labor-surplus and low wage countries to countries that experience capital surplus and shortage of labor. Major receiving countries are located in Europe, The Republic of South Africa, and more recently the oil-rich countries of the Middle East.

By the late 1950s, Europe's surplus of labor was exhausted by migratory movements to the new continents. The countries of Western Europe were experiencing a labor shortage as efforts were initiated to rebuild what the war destroyed. Despite this shortage of mostly unskilled labor, accelerated economic growth in Western Europe was achieved by importing workers from other regions on a temporary basis (guest workers). The number of guest workers reached its peak in the mid 1970s at 6.3 million active migrants and began to decline thereafter (Bohning, 1984). The rise of economic recession and unemployment led governments of Western Europe to restrict the inflow of workers and to

offer promotions for immigrants to return to their countries. The major source of temporary workers in Western Europe are the countries of North Africa, Turkey, Portugal, Spain, and Yugoslavia.

Other major temporary worker-receiving countries are the Republic of South Africa and the oil-rich states of the Middle East. An estimated number of 367,000 temporary workers from Botswana, Lesotho, Malawi, Mozambique, and Swaziland were employed on a temporary basis in South Africa in 1981 (Stahl, 1984). The oil countries of the Middle East have experienced an oil boom since the early 1970s. Ambitious development plans were launched in the wake of the rise in oil prices which led to a sharp increase in labor demand in these countries. This in turn resulted in an unprecedented flow of migrant labor from neighboring non-oil countries of the region and from the countries of East and Southeast Asia as well. The estimated number of temporary immigrants in seven oil-rich Arab countries reached 5.7 million or 35.4 percent of their total population in 1980 (Davis, 1982).

1.2 Definitions of migration

Defining migration involves a considerable disparity among different scholars. Lee defines migration broadly as, "A permanent or semi-permanent change of residence ...; no matter how short or how long, how easy or how difficult, every act of migration involves an origin, a destination and intervening set of obstacles. Among the set of intervening obstacles, we include the distance of the move as one that is always present" (Lee, 1969, p. 285). It is clear that this is a general

definition that includes any act that involves a change of residence. The problem with this definition is that migration seems to be overdefined. Accordingly, movement across the hall from one apartment to another is counted as an act of migration just as much as a move between two countries.

In the international context, Richmond defines a migrant as a, "Passenger whose declared intention is to reside in, or be away from, the country for at least a year" (Richmond, 1969, p. 242). Nevertheless, there seems to be no convincing reason why the passenger should be gone at least one year from his country to be considered a migrant. There are many examples of persons spending considerably less than one year away from their country, yet it is difficult not to call them migrants. For instance, people cross borders to a neighboring country for a few months employment.

The problem with defining migration is that a different definition will apply each time, depending on the specific circumstances under which the move of people takes place. Not many attempts have been made to find a convincing definition of migration that captures all its aspects. Hence, we will accept Lee's general definition with the restriction that the change of residence should occur either from rural to urban areas within the country or from one country to another. This restriction is only a matter of convenience considering the fact that most of the theoretical and empirical studies on migration are devoted to analyzing either rural-urban migration or international migration.

1.3 Forms of migration and types of migrants

A more agreed-upon topic among demographers and economists is the classification of migration in its different forms. First, migration can be involuntary in which people leave their country against their will, or voluntary, where an individual acts by his choice. Migration takes place within the national boundaries, i.e., internal, or individuals cross their national boundaries to another country and become international migrants. A third distinction is between temporary migration that involves limited time, however short or long, and permanent migration when people settle in the new place. Finally, with respect to the country of origin and destination, an individual is called "emigrant" in his original country (place) and his act is "emigration." He is an "immigrant" in the host country (place) and his act is "immigration."

Two things should be noted here. First, these types of migratory acts are not necessarily mutually exclusive. For example, an act of migration may involve one or more forms at the same time. Second, while this classification is widely used in studies of migration this does not mean it cannot be questioned. For example, the distinction between involuntary and voluntary migration or temporary and permanent seems to be vague. A simple question that can be asked is about the point at which migration is considered involuntary rather than voluntary or permanent instead of temporary. This depends on what criteria one adopts in his judgment.

Another issue of potential debate is the classification of foreigners to migrants and non-migrants. Different countries use

different classifications to identify who is a migrant in their territories. Böhning states that, generally admitted, migrants are identified to include, "(1) refugees; (2) economically active persons for the purpose of employment; (3) a residual category such as pilgrims, ministers of religion, diplomatic and assimilated personnel, students, volunteers sponsored publicly or by charity, retired or other persons living entirely on their own means; and (4) a derivative category, namely the parents, spouses, siblings and children of some or all of the preceding three groups" (Böhning, 1981, p. 28). He excludes businessmen, newsmen or tourists from the group of migrants. Again, albeit clear and comprehensive, Böhning's division of migrants to the stated four categories can be questioned in terms of the usefulness of including students, pilgrims, diplomats, ministers of religion and volunteers in the class of migrants.

A final word in our discussion of definitions and types of migration and migrants is that the considerably complex nature of population mobility in terms of its political, social, and economic aspects makes definitions of its elements a matter of convenience in different situations. In fact, there are no universal definitions and finding ones is beyond the scope of this study.

1.4 Objective, hypothesis and methodology

The objective of this study is an attempt to analyze the effects of labor migration on economic development of the sending country. Particularly, the study aims at evaluating the impact of temporary labor

migration from Yemen Arab Republic (YAR) on the development and economic growth of the country during the era that witnessed a considerable increase of workers' flow out of the country, i.e., 1970 to the present.

The tested hypothesis is that, in the long run, emigration of workers has an overall negative impact on the economic growth of the country as a result of economic dependency on external resources and the labor shortage that becomes a bottleneck for the developmental performance of the economy.

Tabular and regression analyses are applied to test the hypothesis using the recently available data. These methods are used to analyze the magnitude and direction of the relationships between different economic variables and indicators and the emigration of labor from YAR during the period specified above.

1.5 Structure of the study

The analysis begins in Chapter 2 with a brief review of the literature on the subject of international labor migration in terms of its relationship with economic development of the sending country. A separate section is devoted to review the literature on the individual case of YAR. In Chapter 3 we introduce YAR and its different characteristics. The discussion about the effects of temporary labor migration on YAR as a labor-exporting country begins in Chapter 4. Tabular analysis is used to hypothesize the functional relationships between the different variables under consideration, and the role of remittances is emphasized. A regression analysis is used in Chapter 5

to estimate the coefficients of the functional relationship between the different variables of interest.

Finally, main results of the study and conclusions drawn are the subject of Chapter 6. A separate section is devoted to discussing policy implications of labor migration from YAR. The study is concluded by presenting the limitations of this work and some suggestions for future research.

2. REVIEW OF LITERATURE

The majority of the literature on contemporary international migration focuses on the explanation of its causes and consequences. However, more attention has been devoted to the study of temporary labor migration and its implications to the receiving rather than the sending countries. More recently, labor migration has been increasingly studied from the perspective of its implications on the socio-economic development of the source societies. More interest of social scientists has emerged in this direction as the interrelation between labor migration and economic growth has become more undeniable.

2.1 Why people migrate

The causes of migration as a phenomenon that involves population movements between different countries and regions have been explained from many different perspectives: demographic, political, social, and economic. Nevertheless, most of the literature emphasizes the economic factors as the dominant force in explaining why people move (Ravenstein, 1889; Barkin, 1967; Lee, 1969; Thomas, 1973).

In his "Laws of Migration," Ravenstein emphasized the role of economic motives in the migratory act where, "Bad or oppressive laws, heavy taxation, an attractive climate, uncongenial social surroundings, and even compulsion (slave, trade, transportation), all have produced and are still producing currents of migration; but none of these currents can

compare in volume with that which arises from the desire inherent in most men to 'better' themselves in material respects" (Ravenstein, 1889, p. 286).

Seventy years later, Lee (1969) published his sound paper, "A Theory of Migration," in which he summarizes the factors in the act of migration in four groups. First, those factors associated with the area of origin, some that attract people to stay and others that tend to repel them, i.e., pull and push factors. The second set of factors, as Lee identifies them, are the factors related to the area of destination, i.e., additional push and pull factors. Third, the migration act is affected by some "intervening obstacles" like distance, physical barriers, immigration laws, etc. Finally, a set of personal factors that facilitate or retard migration is considered. An example of these factors is related to the individual family and psychological factors that affect the individual's decision to migrate.

In the economic literature of international labor migration, push and pull factors have also been identified as important elements of the migration decision problem. Lucas compares migration to a "flow of water or electricity--an adjustment flow responding to pressure differentials at opposite ends of a pipeline" (Lucas, 1981, p. 85). He notes that the relative difference between two places is the one which affects the decision to migrate, not the absolute push-pull factors. Although earning differentials play an important role, there are other economic factors that influence the decision to migrate as well. These include the level of education and the state of unemployment.

Lucas then proceeds to distinguish between internal and international migration, the latter having different aspects like the presence of quotas, visas and regulations on access, obstacles that rarely exist in the case of internal migration.

The importance of labor migration to economic development was first addressed by Lewis (1954) in his well-known dual economy model which was extended by Fei and Ranis (1964). The model considers migration as an equilibrating factor that eliminates wage differentials between the backward, labor surplus agricultural sector and modern industrial sector through the transfer of labor to the latter.

Sjaastad (1962) explains the determinants of migration as the expected costs and benefits for the migrant who calculates the monetary and non-monetary costs and returns of the move.

Later, Todaro (1984) added the probability of the emigrant securing an urban job and the relation between expected income differentials and urban unemployment. He then defines the interaction between them as determinant of migration, that is, the individual calculates the discounted present value of the expected net income and the probability that he will be employed in the urban sector once he moves.

Böhning (1981) criticizes Todaro's dual economy model and other cost-benefit models as being unrealistic. His criticism is based on the "unreality of the underlying assumptions." He views these models as having "the marginal man juggling with a pocket calculator to compute present values of investment in moves to alternative locations" (Böhning, 1981, p. 36). Instead, Böhning argues that the migrant makes his

decisions because of his needs and his will to satisfy these needs elsewhere. Needs can be social, economic or psychological. Finally, Böhning identifies information as a crucial variable in the individual's decision to migrate.

Most of the theoretical explanation of the determinants of labor migration that has been presented above draws upon ideas that were evolved in the internal context. However, other than those factors that have been distinguished in the international case by Lucas (1981) and discussed above, it seems that many similarities exist between factors that influence internal and international migration. Models and theories of internal labor migration have been frequently used to study international migration. A good example of that is the use by Kindleberger (1967) of a dual economy model to study the international labor migration in postwar Europe.

2.2 Migration and economic development of the sending country

In the neoclassical context, migration is seen as the form of the international trade that takes place in the labor market. The argument in this context is that the relative differences in their endowments of factors of production (labor and capital) induce countries to exchange the abundant and cheap factor for the scarce one. If no restrictions are made between two countries, a flow of the factors of production (capital and labor) will occur and continue until their prices are equalized in the two countries. This will create a Pareto-optimal equilibrium and hence benefit both countries given the perfect competition conditions.

This conventional approach to migratory phenomena has been criticized for its simplicity, and strong assumption of a purely competitive and static world (Blackman, 1985) and for its unacceptable idea that the distribution of factors is given a priori and not as a result of development strategies (Amin, 1974). In addition, empirical work and case studies in many regions throughout the world do not always support the hypothesis that international labor migration is beneficial to both the sending and the receiving countries.

In general, there is a widespread agreement that the economic benefits of importing labor outweigh the costs incurred for the receiving country. These economic benefits are often outlined as increased output, increased productivity, economies of scale and general effects of increased labor supply in keeping down wages and prices, hence more profits for investment are generated (Kindleberger, 1967; Salt, 1981).

Nevertheless, these conclusions about the implication of labor migration for the host society were drawn heavily upon the experience of the industrialized countries of Western Europe. These conclusions should not be generalized for the experience of Europe has its unique characteristics. A contemporary example of the difference between Europe's experience and migration in other regions is found in the case of temporary international labor migration in the oil-exporting countries of the Middle East.

The European demand for imported labor has been primarily concentrating on unskilled labor, and the proportion of imported to domestic labor force has remained small. That is not the case in the

Middle East labor market. In the latter, demand has been for all imported skill levels. In addition, the imported labor force in many Middle East oil-exporting countries exceeded considerably the indigenous supply of labor. In some cases, it has exceeded even the native population. For example, in 1975, 52 percent of the population of Kuwait were non-nationals, mainly imported foreign workers (Birks and Sinclair, 1980).

The implications of labor migration for the receiving Middle Eastern oil-exporting countries are different from those for Europe. These include a greater dependency and social and political problems for these countries.

The consequences of labor migration on the economic development of the sending society are more complex than casual observation may suggest. Unlike the case of receiving countries, the overall impact of labor outflow on the countries of origin is an object of contention among interested social scientists. Theoretical and empirical studies differ in their conclusions as a result of differing methods, cases, and variables considered in the evaluation.

As expected from a topic of great dispute, scholars can be divided into three different groups with respect to their opinions about the implications of labor outflow on exporting countries. One group argues that labor emigration is bad in that costs of it to sending countries outweigh its benefits. The second group take the opposite extreme and argues that though there are some costs incurred by labor emigration, its overall impact proves to be positive. Between these extremes lies the

view that goodness or badness of labor emigration depends on different cases, circumstances and, above all, success or failure of migration related policies of the countries concerned.

In evaluating the economic impact of labor export, some or all of the following variables are considered: (1) effects of emigration on the state of employment and output in the export society; (2) the impact of emigration on the skill level of returned migrants, and the applicability of the new skills, if any, in the domestic environment; (3) the impact of probable new ideas that migrants return with on the social and economic structure of their original country; and (4) the inflow of migrant remittances (Swanson, 1979).

Kindleberger (1967) gives an optimistic picture of the role of labor migration in the economic development of Europe in the postwar era. He argues that labor migration from the underdeveloped countries of Europe (Portugal, Greece, Spain, and Turkey) to the more developed ones has benefited both sides.

He summarizes his view by stating that, "Economic growth can be sustained by emigration and higher wages as well as by unlimited supply of labor and constant wages." And that, in his words, "This has been the path followed by Portugal, Spain, by Southern Italy (if that could be isolated readily in the statistics from Northern Italy), by Greece and to a limited extent by Turkey" (Kindleberger, 1967, p. 87). In the latter, Kindleberger explains, stimulating economic growth by labor emigration was not as successful because unemployment was so massive that emigration could not result in a sufficient reduction of it.

In a study about the impact of labor migration from Pakistan to the countries of the Middle East, Burki (1984) points out the difficulty that faces social researchers in analyzing costs and benefits of labor emigration. For Pakistan, Burki identifies the positive role of remittances in maintaining the country's GDP growth at the 5 percent level instead of an estimated 2 percent had emigration not occurred.

However, Burki shows how these benefits are obtained at some costs represented by loss of output and skills; inflation generation; and the rise of consumption patterns that are inappropriate for Pakistan's development.

After analyzing the impact of labor exporting at the micro and macro levels, Burki arrived at the conclusion that, "On balance, international migration has benefited the economies and the societies of many developing countries." Nevertheless, he points out, "A more precise picture of the impact of migration could be--and perhaps will be--drawn when better data become available but it is unlikely that the overall impression will be very different from the one conveyed in this paper" (Burki, 1984, pp. 683-684).

A recent study (Chaney, 1986) suggests that labor migration from Portugal has significantly contributed to the country's economic growth in the period 1960-1981. This conclusion is heavily based on the argument that emigrants' remittances flow has been "an important source of foreign exchange that removed binding foreign exchange constraint." This, in turn, helped economic development by making it possible to import for development needs. In addition, remittances have contributed

to domestic savings formation that is crucial in the growth process. Chaney then contends that "remittances have not been wasted on 'luxury' consumer goods as so many social scientists sometimes argue" (Chaney, 1986, pp. 32-33).

Other optimistic findings about labor emigration are expressed by Oberai and Singh (1980) in a study about rural Indian Punjab, by Wilson (1976) in the case of labor migration in South Africa and by Friedlander (1965) in the case of Puerto Rico as a labor-exporting territory. Beijer (1969) also concludes that emigration is favorable to the sending society, and so does Michalopoulos (1968), Hume (1973) and Kirwan (1981).

Shaw (1979) views the construction sector in the Arab world as having a key role in the positive impact of labor migration on the economic development of both the receiving and sending countries of the region for it is the main employer of labor in these countries.

While the previously mentioned studies have been giving a roseate picture of international labor emigration, several others do not share the same optimism. In fact, there is a wider agreement that labor emigration is generally more harmful to the sending society than it is beneficial.

Böhning is one of recent writers who are skeptical of the alleged benefits of labor migration to the sending country. In his analysis of labor migration from the Mediterranean Basin to West Europe, Böhning points out to the increasingly challenged view of labor outflow from developing countries around the Mediterranean Basin as a wholly beneficial (Böhning, 1984). He argues that labor emigration plays a

role in relieving the unemployment pressure of labor-surplus countries and that remittances are a welcome addition to the country's foreign exchange. However, he points out that this is not the whole story. Although beneficial to individuals, emigration has negative effects on the society in that it may result in a loss of skilled workers and inflation through remittances, which hinder domestic development.

Böhning then concludes his analysis by some proposals about setting up a comprehensive system of communications, selection and incentives to utilize the return of skilled and semi-skilled workers, and putting labor emigration in the picture when formulating the overall developmental strategies of the sending countries.

Amin (1974) has arrived at a similar outcome, though from a different perspective, about labor migration in Western Africa. He criticizes the "fallacy" of the idea that migration is beneficial to the region of emigration. In Amin's view, though emigration is a result of a hope for better income for migrants elsewhere, "it is forgotten that they are obliged to get money within the framework of a system that gives them no alternative" (Amin, 1974, p. 99). He points out that the costs and benefits to the individual migrants do not parallel those to the country or region of emigration.

The implications of migration on the source region are dramatic in Amin's words. They include exclusion of any alternatives to the increasingly unequal development between the source and host countries, and the weak probability that remittances can make the opposite correct.

In addition, the role of emigration as an enhancer of structural change in the emigration region is, in Amin's view, questionable.

The same pessimistic view of labor emigration is shared by Rubenstein (1982) in his work about the impact of remittances in the rural English-speaking Caribbean. In his view, remittances should be studied with respect to their impact on rural productivity, agricultural output, population well-being and resource distribution. He concludes that the evidence in the case of the English-speaking Caribbean is not encouraging on these issues.

Other studies about the Caribbean that do not see labor outflow from the Basin as wholly beneficial are found in a collective work about emigration and economic development in the region (Pastor, 1985). While the problem was analyzed from different perspectives, almost all contributors, in one way or another, shared the doubts about whether labor emigration from the region was at all contributing to her economic development positively.

In a study about the effects of high skilled labor migration from developing to developed countries (the Brain Drain), Bhagwati (1979) arrived at an interesting conclusion. He argues that negative effects of brain drain are not deniable. Therefore, Bhagwati suggests the adoption of a global tax system. In this system, the developing countries will share with the developed countries tax revenues on high skilled labor. The adoption of this system will give the chance for developing countries to be compensated for the loss imposed on them by the brain drain, or in other argument, the developed countries should share the gain from such

migration with the developing countries that are in need for any resources in their economic development. This view of Bhagwati, though ideal, is unlikely to be reached for it is difficult to implement such a system in reality.

The assessment of labor emigration as being either beneficial or harmful to the economic growth of the labor exporting countries does not encompass the whole story. Some writers emphasize that labor outflow can be good or bad depending on many variables like the specific economic, social and political environments in each country. The role of national policies towards labor emigration is crucial in achieving or failing to achieve the desired outcome.

Therefore, economic implications are bound to vary among individual countries. They depend primarily on number, employment and occupation of emigrants; on the economic structure and government policies organizing the outflow of workers and inflow of remittances (Ecevit and Zacharia, 1978). In addition, economic implications should not be the only element to be considered but should be accompanied by analyzing the impact of labor emigration on other value systems such as human gains and disadvantages which by themselves depend on specified policies of the government (Barkin, 1967).

From the foregoing discussion of the literature, it becomes clear that the evaluation of labor export consequences on the sending society is not an amenable task. It is also not wise to generalize conclusions that have been arrived at depending on analysis of an individual country case. Each country possesses its different characteristics and so does

emigration phenomenon in that country. Accordingly, any findings or conclusions drawn on an individual country's experience should be confined to directing its own economic development strategies.

2.3 Review of the literature: the case of Yemen Arab Republic

Contemporary labor migration from Yemen Arab Republic (YAR) has been a subject of some research. Interestingly enough, unlike research on other sending countries, all studies in hand agree, given different aspects analyzed, that temporary labor migration from YAR to her neighboring countries has an overall long-run negative effect on the development process of the country.

Al-Kasir (1985) in his analysis of the subject addresses the issue of social implications of labor emigration. Labor outflow has induced a shortage of labor in YAR, a rise in real wages and production costs in the agricultural sector and other sectors, and increased active rural-urban migration. Implications on the production structure in agriculture of these changes, in his view, are apparent. They have helped to fracture the old rigid social structure and eased the emergence of a new set of social relations. In addition, he points out, migration "contributed to the separation of large numbers of the population from the land" (Al-Kasir, 1985, p. 130).

The study of Al-Kasir is useful for it is the first one of its kind addressing the issue of the influence of labor emigration from YAR on her social structure. Other studies, as we shall see, confine themselves to a more quantifiable element, namely economic variables.

Economic implications of labor migration from YAR has been analyzed using its different aspects. For example, Meyer (1985, 1986) examines the development of labor emigration and its effects on the economy and on internal migration. In the second part of his study he tests empirically the interdependence of labor emigration abroad, internal migration, and development in the urban building sector of the YAR; the latter being of interest for its key role in the country's economic development.

In his interview of 7149 people in the construction sector and related activities in 17 urban centers, Meyer found that 33% of them had worked abroad and acquired skills there and found the urban construction sector the best place to settle.

Meyer notes that his findings about the development of the urban construction sector in YAR support Shaw's (1979) view of construction sector playing a key role in a positive economic development in the Arab labor exporting countries. Shaw's argument was based on his view of the construction sector in the Arab world as being "one of the few economic sectors that can simultaneously contribute to the satisfaction of several 'basic needs'" (Shaw, 1979, p. 590).

Finally, Meyer concludes his study showing how labor emigration in YAR, though significant for the development, may induce large movements of population from rural to urban areas. "It is not yet too late," he concludes, "to prevent the uncontrolled acceleration of this process by taking appropriate governmental measures for the development of the rural areas and small towns" (Meyer, 1985, pp. 162-164).

Swanson (1979) has worked on analyzing labor migration from YAR and its developmental impacts on the country's development. Based on a field research conducted in three Yemeni villages, he shows how export of adult workers has become a more important source of income than agriculture for these villages. The result is a massive reduction in local labor force and a considerable flow of remittances from abroad. Swanson argues that while this "influx" of money made Yemenies better fed, clothed and housed, its contribution to the country's economic development is questionable.

Swanson's argument is based on his test of the impact of labor emigration on labor supply, the flow of cash (remittances), level of migrants' skills and the new ideas acquired by them. In the case of YAR, Swanson argues that changes in these variables due to emigration were not in favor of the long-term development of the economy. Therefore, Swanson concludes his study by suggesting some measures that can bring about changes to the better in the country's economic performance. These measures include restricting imports, promoting local industrialization and limiting emigration. These recommendations, he notes, "would demand great sacrifices on the part of many Yemenies." But to do nothing, in his view, is to remain in the underdevelopment path and to increase dependency on the external world.

Fergany (1982) arrived at similar pessimistic conclusions about YAR labor emigration. Emigration has caused labor and skill shortages. The nature of the Yemeni unskilled emigrants make it unlikely for them to gain important skills abroad. In addition, Fergany argues, emigration

and remittances have had an adverse effect on the international financial position of YAR through its long-run negative effects on the trade balance. That was due to increased mass consumption of imported goods which was financed by remittances but outweighed the inflow of remittances to result in a trade deficit.

The increase of GDP growth that accompanied the flow of emigrants can be attributed, in Fergany's words, to a growth of GDP mainly from the trade sector. This, by itself, does not reflect a build up of a stronger production base. Furthermore, these negative effects of emigration are exacerbated by a spectacular demand-pull and cost-push inflation resulting from an enormous increase in liquidity and from supply and imports bottlenecks.

Like Swanson (1979), Fergany concludes his work by addressing the issue of YAR dependency on other countries through labor emigration. He also points out the risk involved in the dependency on migrant remittances, the size of which not only depends on economic conditions of the receiving society but also on the political climate between sending and receiving countries.

3. INTRODUCING YEMEN: THE COUNTRY AND ITS PEOPLE

In order for us to understand the underlying factors, evolution and the future of the Yemeni labor emigration and its relation with the country's economic growth during the seventies and up to the mid-1980s, it would be useful to introduce the country. The introduction encompasses the geographical, recent historical, demographic and economic characteristics of the Yemen Arab Republic (YAR).

3.1 Geography

Contemporary Yemen consists of three political units: Yemen Arab Republic (YAR), People's Democratic Republic of Yemen (PDRY) and the northern provinces of Asir and Najran which have been under the control of Saudi Arabia since 1934.

Yemen Arab Republic, the subject of this study, is located at the southwestern corner of the Arabian Peninsula. It has an area of approximately 75,000 square miles, and is bordered by PDRY on the south and southeast, the Red Sea on the west, the Empty Quarter on the east and Saudi Arabia, with undefined borders on the north.

The area of YAR is divided into three principal geographic regions: the coastal plain Tihama, the mountainous interior and the eastern slopes. The Tihama is a hot, humid region occupying about 10 percent of the country's area (Nyrop, 1977). The mountainous interior consists of the central mountain range which extends from the province of Taiz in the

south into Saudi Arabia in the north. The elevation of the central mountains ranges from 660 to 12340 feet above sea level (CPO, 1984). The central mountainous region has seven major valleys that open into the eastern slopes, Gulf of Aden and through the Tihama into the Red Sea. The eastern slopes form a very fertile but dry area. The old Marib Dam is located here. The dam was built to control the floods that come from the highlands; and the stored water was used to irrigate the surrounding area.

What distinguishes YAR from the entire region of the Arabian Peninsula is her location along the line of Intertropical Front which exposes her to the monsoon system, generating considerable amounts of rainfall. In addition, the geographical structure of YAR permits a considerable variation in climate between her different regions. In fact, all levels of temperature are found, ranging from 104 degrees F. in the hot summer of the Tihama to sub freezing readings in the winter of the highlands. As a result, the country is the green spot in the Arabian desert, agriculture is the economic base, and YAR is the most densely populated country in the region.

3.2 History

The republic in northern Yemen (YAR) was declared on the 26th of September, 1962. The revolution of 1962 uprooted the tyrannical Imamic rule of the Hamid Al-Deen family which lasted since the independence from the Ottoman Empire in 1918. Prior to the revolution, the ruling family practiced a policy of repression and absolute isolation from the outside

world. This resulted in the people suffering from the dreadful three: poverty, ignorance and disease.

The destructive role of the bygone family extended to the early 1970s. The last deposed Imam turned to the foreign governments seeking help to recover the throne. As a result, a devastating civil war erupted and lasted more than seven years resulting in unrest and foreign intervention. This jeopardized the new governments' efforts to establish effective developmental programs, and limited what could have been accomplished during the remainder of the 1960s.

Since the end of the civil war in 1970, the country, despite political instability, has experienced an era of dramatic socio-economic changes. During this period, the infant republic has faced developmental challenges, beginning from nothing.

3.3 The economy

The economy of YAR is predominantly agricultural. In 1980, agriculture employed 75 percent of the labor force and contributed 29 percent of the GDP (World Bank, 1984). As Table 1 indicates, the relative share of agriculture in the GDP has decreased. This share dropped to 20.7% of the GDP in 1984 after it was 52.2% in 1970. The decline in agricultural contribution to the GDP was matched by a rapid increase in the share of government administration services and defense, in the share of trade and finance and, to a lesser extent, by an increase in the share of industry and other sectors.

Table 1. Sectoral output as a percentage of GDP^a

Economic Sectors	1970	1975	1980	1984
Agriculture	52.2	43.6	29.0	20.7
Industry ^b	5.1	6.3	6.8	9.3
Construction	4.9	4.7	8.4	7.6
Electricity and Water	0.3	0.3	0.6	1.3
Transport and Communications	2.8	3.7	3.6	4.0
Trade and Finance	17.6	20.4	24.6	22.5
Public Administration and Defense	7.4	10.6	12.6	21.5
Others ^c	9.7	10.4	14.4	13.1
Total	100.0	100.0	100.0	100.0

^aWorld Bank, 1984 and CPO, 1985.

^bIncludes mining and manufacturing.

^cIncludes custom duties, community and social services.

The change in the relative shares of different sectors in the GDP during the last two decades reflects the structural change that the national economy as a whole has experienced. There has been a shift of the agricultural labor force to other newly established activities. In addition, the central government contributed to these changes by introducing basic economic institutions that did not exist before, and

expanding public administration and defense services. Finally, the most important contributing factor to the structural transformation of the economy was the outflow of workers to the neighboring oil-rich countries and the accompanied inflow of remittances. This has resulted in a dramatic change at all levels of the economy of YAR.

3.4 Population

As indicated above, YAR is the most populous country in the Arabian Peninsula. According to the general census of 1986, the total population is 9.3 million. Of this total, 1.2 million people were estimated as short-term or long-term migrants outside the country (CPO, 1986). The average annual growth rate of the population between 1975 and 1985 was 3.3 percent. This high growth rate represents the significant changes in the overall demographic characteristics that YAR has been experiencing. There has been a significant reduction in infant mortality rate, and the life expectancy at birth has increased considerably.

Table 2 implies that YAR has all characteristics that a developing country is expected to have. These are represented by a high fertility and infant mortality rate, and a low life expectancy and adult literacy rate. However, YAR differs from most other developing countries since the majority of her population is concentrated in rural areas. In 1986, about 88 percent of the total population was rural. The population of the largest urban center, the capital Sanaa, was 427,000 in 1986 (CPO, 1986).

Table 2. YAR: Selected demographic indicators^a

Items	1960	1965	1970	1975	1981	1986
Total population (million)	4.2	4.7	5.3	6.5	8.5	9.3
Urban population (% of total)	3.4	4.5	6.0	7.9	10.8	11.7
Population per square mile	56.0	62.0	70.0	87.0	114.0	124.0
Overall sex ratio	n.a.	n.a.	90.4	91.0	n.a.	96.8
Fertility rate	7.0	6.9	6.8	6.8	6.8	n.a.
Infant mortality (per thou.)	211.6	n.a.	n.a.	n.a.	190 ^b	n.a.
Life expectancy (years)	35.8	37.2	37.8	40.2	48.5	n.a.
Adult literacy rate (%)	2.5	n.a.	10.0	n.a.	21 ^b	n.a.
Labor force (thousand)	n.a.	n.a.	n.a.	1127.5	1331.0	n.a.

^aWorld Bank, 1984 and CPO, 1986.

^b1980.

4. LABOR EMIGRATION AND ECONOMIC DEVELOPMENT IN YEMEN ARAB REPUBLIC

4.1 History of Yemeni emigration

Yemeni emigration can be dated back to the time when the Great Dam totally collapsed in the 7th century B.C. The collapse of the dam led to movements of people to other areas because their source of living was diminished. The second important wave of emigrants accompanied the conquering Islamic legions beginning in the 6th century A.D. Yemeni emigrants have settled wherever they reached, in the Middle East, Africa, Asia and southern Europe. Emigration from Yemen did not stop at this point but became a "persistent characteristic of southwest Arabian history for several milleannia" (Swanson, 1979, p.48).

During the Imamic rule, tens of thousands of Yemenies fled the suppression and despotism of the ruling family. British-occupied Aden in the south was their transit point from which they crossed the seas to east and southeast Africa to Djibouti, Ethiopia, Somalia, Sudan, Kenya and other African countries. Some of the emigrants headed to east Asia, Europe and North America. The outflow of Yemenies during that time and up to the revolution of 1962 was characterized by its long-term nature for emigrants had lost any hope of a better life at home.

In 1962, many long-term emigrants started to return as they heard about the revolution and the new life opportunities inside the country. However, a new wave of emigration began in the early 1970s. It was the

Table 3. Estimates of long-term emigration from North Yemen to the host countries^a

Countries	Number of long-term emigrants	
	Low estimates	High Estimates
South Yemen	30,000	40,000
Ethiopia and Djibouti	37,000	60,000
Somalia and Sudan	26,000	40,000
Egypt and Jordan	12,000	20,000
England and France	13,000	20,000
United States	12,000	20,000
Other countries	20,000	50,000
Total	150,000	250,000

^aFrom Meyer, 1986.

continuation of emigration behavior that has been an aspect of the Yemeni society and apparently will continue to be so in the future.

In the early 1970s, the oil-exporting countries of the Arabian Peninsula and The Gulf entered a new phase in their development. The considerable increase in oil prices led to an unexpected increase in oil revenues. The flow of money into these states was tremendous and sudden. In the wake of this unexpected wealth, the oil states initiated huge investment plans in their efforts to achieve a rapid development and

economic growth. With small indigenous labor forces, these plans resulted in a large demand for imported temporary workers from other countries.

The location of YAR close to these oil-rich states gave Yemeni workers a comparative advantage to take the lead in the labor market of these states. YAR became the main supplier of workers to Saudi Arabia and, to a lesser extent, other Gulf states. Saudi Arabia, as the closest oil country to YAR, attracted about 97% of the total Yemeni temporary migrant workers in 1975 (Birks and Sinclair, 1980). The concentration of Yemeni migrants in Saudi Arabia can be explained by two factors. First, the short distance that the migrant had to travel into the neighboring country and the associated low costs of transportation. Second, Yemeni migrants were not required to have labor contracts prior to their travel into the kingdom. This was in contrast to other oil countries which required workers to have contract with a domestic firm prior to getting entry permission.

The estimates of Yemeni emigrants abroad range from an official number of 1.23 million in 1975 (CPO, 1986) to 350,000 of which 290,000 are temporary migrant workers (Birks and Sinclair, 1980). Those who have been concerned with Yemeni emigration agree that the official number is an over estimate of the actual magnitude of Yemenies abroad (Meyer, 1985, 1986; Birks and Sinclair, 1980; World Bank, 1979). The World Bank has estimated the Yemeni migrant population at 600,000 (World Bank, 1979). And while there are no official estimates for recent years, a casual observer may describe the outflow of workers in the last fifteen years as

massive. It represents about 24 percent of the total labor force of YAR and 32% of the total Arab migrant workers population in the major labor importing countries (Table 4).

The annual flow of Yemeni labor emigrants has been estimated at 60,000 to 85,000 people since the oil boom of 1973. The total number was about half a million in the Arab oil countries alone in 1980 (Meyer, 1986). Figure 1 and Table 5 depict the estimated increase of labor outflow from YAR to the Arab oil-exporting countries between 1969 and 1980.

Regardless of the accuracy of these estimates, they seem reasonable in capturing the trend of the increase of labor outflow during the indicated period. The outflow of workers has increased since the oil boom of the early '70s. However, the rate of increase has slowed considerably since 1976 and probably the number of workers has stabilized at the 1980 level, or has even begun to decrease. This reflects two developments in the labor market of the importing countries. First, the completion (or so) of their infrastructure development and the decline in the demand for construction labor. Second, the trend to replace Arab workers with workers from Southeast Asian countries for economic and mainly political reasons (Richards and Martin, 1983).

An important point in our discussion about the labor outflow from YAR is its dynamic nature. The easy access to Saudi Arabia and other advantages that we mentioned earlier resulted in a short-term type of emigration. A typical Yemeni emigrant stays abroad for not more than one year (of course with some exceptions). Migrants usually leave after the

Table 4. Stock of migrant workers in the labor-importing countries
by country of origin (1975)^a

Country of origin	Number (1000's)	Percentage Share %
Egypt	353.7	22.0
Iraq	18.7	1.2
Jordan	139.0	8.6
Lebanon	28.5	1.8
Morocco	2.2	0.1
Oman	30.8	1.9
Sudan	26.0	1.6
Syria	38.1	2.4
Tunisia	29.8	1.8
Y.A.R.	328.5	20.4
P.D.R.Y.	45.8	2.8
Non-Arab countries	568.9	35.4
Total	1610	100.0

^aSerageldin et al., 1983.

Number of Emigrants

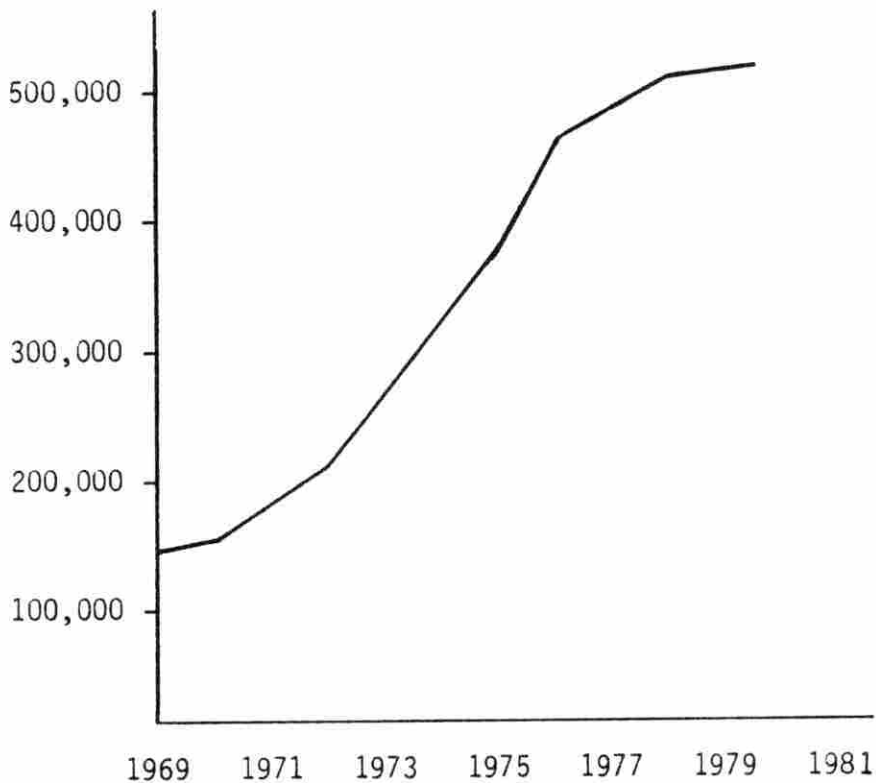


Figure 1. Temporary labor migration from YAR to the oil-exporting countries (Meyer, 1986)

fasting month (Ramadan) or after the Major Feast and return the following year to enjoy being with their families during the feast days. In addition, new Yemenies become emigrants every year and others stop emigrating after achieving their goals (usually building a house, getting married, etc.). Hence, we can conclude that while labor emigration may amount to some number at a time, it involves more Yemenies than any point estimate may suggest.

Table 5. Estimates of temporary labor migration from YAR to the oil-exporting countries (1969-1980)^a

Year	Estimated Number of Workers	Rate of Increase
1969	125,000	--
1970	140,000	12
1971	175,000	25
1972	200,000	14
1973	240,000	20
1974	300,000	25
1975	370,000	23
1976	450,000	22
1977	480,000	7
1978	500,000	4
1979	510,000	2
1980	520,000	2

^aBased on Meyer, 1986.

4.2 The effects of labor emigration on YAR

Interested scholars usually consider some or all of the following variables in their analysis of the effects of temporary labor migration on the sending country: (1) impact of new ideas and attitudes of the returnees; (2) impact of emigration on the skill level of the migrants; (3) effects of the labor outflow on the domestic employment and supply of output; and (4) impact of remittances on the different economic variables. In our analysis of YAR as a labor-exporting country, we shall follow this precedent. However, we shall briefly discuss the first point. In addition, points 2-3 which capture the effects of labor emigration on the supply side of the economy will also be discussed briefly because of inadequate information that is necessary for us to include supply variables in the empirical analysis.

4.2.1 New ideas and attitudes While abroad, Yemeni emigrants learn new ideas and develop new attitudes. These are brought with them upon their return, and contribute to changing production patterns and means in the local community and forming new consumption patterns. In this regard, casual observations suggest that these new elements play an important role in the overall development of the country.

It is not uncommon that returnees purchase a new tractor, water pump or open their own workshop in the city or local center. Furthermore, upon return, emigrants search for goods that they used to consume in the host country. This results in the introduction of new consumer goods,

most of which are imported. These consumption trends spread all over the country by the effects of matching practices. These conclusions in the case of YAR are supported by the findings of Swanson (1979) and Meyer (1986).

The effects of the introduction of new ideas and attitudes on the national economy depends on whether this introduction stimulates domestic production. In the case of YAR, the introduction of new production patterns and tools should be regarded as useful, but is actually limited (Swanson, 1979). On the other hand, the new-formed consumption patterns have generated a massive demand for consumer goods which has been satisfied primarily by importation, not domestic production.

In addition to the effects of returnees on the production and consumption patterns, they also have been an effective factor in forming the people's national consciousness and the establishment of a new social structure (Al-Kasir, 1985). What the implications of these are to the society is difficult a question. The judgement on these implications depends on what criteria one uses and whether one considers long-run or short-run implications. Our intention here is to identify the occurrence of these changes; it is of interest to sociologists to deeply analyze them.

4.2.2 Impact on the skill level and supply of skills The issue of whether an emigrant gains new skills from his employment abroad has been linked to the skill level of the emigrant upon departure from his country for the first time. It has been widely argued that the

emigrant is more likely to gain skills from his work abroad if he originally had some skills upon departure. If the emigrant is unskilled, then the probability of him acquiring any important skills abroad is very low.

The conclusion that the emigrant will not acquire new skills if he were originally unskilled has probably been drawn from the experience of the guest workers in Western Europe. In this case, emigrants from developing countries have been employed in jobs that require only low or no skills, or as industrial laborers. In the latter case, the sophisticated nature of industry in these countries and labor division practices results in little chance for foreign workers to gain important skills. Furthermore, even if the emigrant acquires some skills, the applicability of these skills back home is questionable because of the different level and type of technology used there.

In the case of YAR, emigrants to neighboring countries are mostly unskilled. Hence, if we accept the preceding argument, they are not expected to return with more skills. This is probably what led Swanson to conclude that, "... few Yemeni migrants learn skills abroad, and the skills that are learned are inappropriate for the home situation" (Swanson, 1979, p. 63). However, Yemeni workers abroad, mostly in Saudi Arabia, are usually employed in the construction sector, services and some small industries. They, in fact, do learn skills that are important in their homeland because of the primitive structure of the country and the very need for any skills, whatever their level. These skills have proven to be applicable at the national context. The argument about the

existence and usefulness of the new skills is supported by the findings of Meyer (1986) in his study about labor emigration and the urban building sector in YAR. In addition, Shaw (1979) shows the importance of the construction sector in the inter-country labor migration in the Middle East for its role as a main labor and capital employer in the labor-importing as well as labor-exporting countries of the region. Because approximately 75% of the total Yemeni emigrants are employed in the construction sector abroad, the returnees make a major contribution to the construction sector and related industries in YAR.

In addition to the skill level of the returnees, emigration is considered a factor leading to the reduction of skill availability to the economy through the "Brain Drain." The fact that the majority of Yemeni emigrants are unskilled workers (World Bank, 1979), the probability of the "Brain Drain" occurring is minimized. Of course the Yemeni migrant community is not devoid of skilled migrants, but the percentage of the skilled portion is very small, as supported by previous studies.

4.2.3 Output and employment It has frequently been assumed that exporting manpower from developing countries is one positive contribution to their economic growth. The reasoning is that the export of unemployed, unskilled workers contributes to the relief of domestic unemployment and may even, "... increase employment through feedback effects" (Serageldin et al., 1983, p. 70). In addition, the forgone consumption of the migrants and the savings in government expenditures on the welfare of the absentees, are all investable resources.

YAR is poor in natural resources. Its wealth lies in its people. In 1975 the labor force amounted to 1.1 million resident workers or 25% of the total resident population. The volume of the labor force was 1.2 million workers in 1981, an increase at an average annual growth rate of 1.8%.

The prevailing view on the issue of labor outflow effects on the domestic supply of labor and output in YAR is that labor-emigration has incurred a severe domestic skill and/or labor shortage. These shortages jeopardize the growth of the economy, especially in the agricultural sector, which is the major employer of labor (Table 6), and the mainstay of the economy (Al-Kasir, 1985; Swanson, 1979; Fergany, 1982). Our discussion focuses on the two types of shortages: shortage of skills and shortage of labor. First, as indicated in section 4.2.2, we ruled out the probability of significant skill loss by emigration or a "Brain Drain." The second type of shortage, the most important, is the shortage that emigration might have caused in the supply of labor as a whole. There are some indicators that might tell us of a possible existence of a shortage of farm labor. These may include a decline in the cultivated area, a rise in the real wage rate and/or a reduction in agricultural production. In addition, it has frequently been argued that the shift from labor-intensive, low-valued traditional crops to high-valued cash crops and the abandonment of marginal terraces, are also indicators of the existence of an emigration-induced labor shortage in the agricultural sector of YAR.

Table 6. Employment of labor force by sector between 1975 and 1980 (%)^a

Sectors	1975	1980
Agriculture	75.4	69.1
Industry	3.2	4.6
Electricity and Water	0.1	0.3
Construction	4.8	6.0
Trade and Finance	6.5	6.3
Transport and Communications	2.2	2.6
Government Services	7.8	11.1
TOTAL	100.0	100.0

^aHofmann, 1982.

The available data about the cultivated area and production of agricultural crops (Table 7) show an increase in the area under cultivation between 1970 and 1974. The estimated migrant labor flow (Figure 1 and Table 5) would suggest a drop in the area under cultivation due to the labor outflow if emigration had induced a shortage in the supply of labor in the agricultural sector. Because a significant substitution of labor by capital is doubtful (Swanson, 1979), there is much doubt about an existence of a significant labor shortage during that period indicated by a decline in the area under cultivation.

Table 7. Area and production of agricultural crops, 1970-1984 (Area: '000 hectares; Production: 000' tons)^a

Crops	1970		1972		1974		1976		1978		1980		1982		1984	
	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production	Area	Production
Cereals	1070	794	1039	826	1196	1089	924	760	826	778	822	798	836	760	835	382
Vegetables	62	120	82	270	96	310	103	392	110	425	113	476	112	530	114	579
Fruits	8	36	18	100	21	105	23	125	24	128	26	140	28	159	31	184
Coffee	5	4	9	3.5	8	3.0	7.5	3.4	7.7	3.6	7.7	3.6	7.7	3.3	7.4	3.2
Cotton	5	2	20	18.5	28.3	27	6.3	5.3	5.6	4.8	5.3	5	7.4	6.5	4.25	3.7
Others	13	45	15	47	16.4	49	19	54	19	55	20	57	20.5	61	17.5	56
TOTAL	1163	1001	1183	1265	1366	1583	1083	1340	992	1394	994	1480	1012	1520	1009	1208

^aWorld Bank, 1979 and CPO, 1985.

Beginning in 1976, the area under cultivation has declined even though it has increased in some years. The general decline in the total cultivated area may be attributed to a labor shortage in agriculture. However, many other factors should also be considered. They include the effects of weather conditions, the negative effects of the emigration-generated income on the willingness of farmers to cultivate (World Bank, 1979, p. 101), and the substitution of traditional crops by Qat.¹ The area devoted to Qat is not included in the official statistics and is of a substantial magnitude (Varisco, 1986).

In addition to the total area under cultivation, the total agricultural output and the daily wage rate have often been used as indicators of the availability of agricultural manpower. The agricultural area in YAR is 85% rainfed (World Bank, 1979). The rainfall, however, occurs in an erratic fashion varying considerably from year to year. This, in itself, insures that variations in agricultural output are not a good indicator of labor supply. According to the data for the last 14 years (Table 7), cereal production (which depends mostly on rainfall) varied considerably throughout the whole period while that of other crops (which depend on irrigation means other than rainfall) has steadily increased.

The daily wage rate in the agricultural sector and in general has been increasing considerably throughout the last decade until the present (World Bank, 1979; Swanson, 1979; Fergany, 1982; Meyer, 1986). However,

¹Qat is a small shrub with narcotic leaves which Yemenies spend afternoons chewing.

the reported increase is in the nominal wage rate, not the real one. Even if the real wage rate has increased significantly, this should not be blindly taken as an indicator of an emigration-induced labor shortage. The wage rate is economically determined by the interaction between supply of and demand for labor force. A higher wage rate can be caused by a shortage of supply as well as excess demand. Demand for labor in the agricultural sector may have increased as a result of the income effect of remittances as they contributed to the emergence of the market economy and as hired labor is substituted for family labor. Furthermore, a wage rate increase can indicate higher productivity as the wage rate is equal to the value of marginal product at the point where there is no infinitely elastic supply of labor (which we believe is the case in YAR).

Two more indicators of a probable emigration-induced labor shortage in YAR are the change in the kind of crops produced and the abandonment of marginal agricultural terraces. There has been a significant shift from the production of traditional food crops to higher-valued cash crops. The production of cotton, which is a labor-intensive crop, has dropped considerably in the last 10 years (Table 7).

A shortage of labor may explain these two developments; but several other factors could contribute to them as well. The shift in the relative prices of other crops may induce a shift from the production of cotton (World Bank, 1979, p. 94). In addition, Table 7 shows that commercial cotton production began to increase after 1970, reached its peak in 1974 and declined thereafter. This development coincides with the establishment, the initial success and then the failure of the

General Cotton Company (GCC). The GCC was established by the government to encourage cotton production by providing agricultural loans to finance the cotton season and adopt the marketing process of the product. Accordingly, cotton production increased from 2 thousand tons in 1970 to 27 thousand in 1974 but decreased considerably thereafter.

The shift in agricultural production to cash crops has accompanied a general emergence of the market economy in the rural areas which was caused by larger cash incomes from emigrants' remittances (World Bank, 1979). Production of vegetables and fruits has increased steadily since 1970; production and acreage of traditional food crops has decreased (Table 7). A striking example of these developments is the increased importance of Qat, as a high-valued cash crop, which has been replacing food crops and even other cash crops. In 1982, the value of Qat crop was estimated at 3.3 billion YR at 1980 prices (Varisco, 1986). Comparably, the value of the whole agricultural production was 3.4 YR billion for the same year. The transformation to cash crops induces more demand of labor, since cash crops are known to be labor-intensive. This by itself may partially explain other development (like the wage increase); however, it may also be a result of other market forces.

A final point that has been used to demonstrate an emigration-induced shortage of agricultural labor is the abandonment of marginal terraced land. Again, it is not clear whether the abandonment can be explained by a single factor, i.e., labor shortage. Other economic factors may contribute to the abandonment as well.

Summarizing, it has been argued that labor emigration from YAR has resulted in a severe shortage in the domestic supply of workers which, in turn, has resulted in undesirable outcomes in the growth of agricultural sector (the concentration of the analysis on agriculture is due to its importance as the main economic sector and to the belief that it is the most affected sector by emigration). This analysis does not show the contrary, but shows that it is oversimplifying to blame labor shortage (that may have resulted from emigration) for the stagnation and deterioration of agriculture in YAR without also considering other factors. Besides the role that a probable labor shortage may have played, there has been a fast and dramatic structural transformation in agriculture and in the economy as a whole.

The evolution of the economy of YAR from a traditional subsistent to a more market-oriented economy has been so rapid that it has resulted in radical changes that have pervaded throughout all economic activities in the country. The role of labor emigration in this regard is apparent. And while there are doubts on the role of labor emigration in a shortage of the domestic labor supply, the effects on the economy through other variables, like remittances, is undeniable.

4.2.4 Remittances In addition to repatriated ideas, attitudes and skills, emigrants make large amounts of cash and in-kind transfers into YAR. As indicated in the last section, remittances have an overwhelming direct and indirect role in explaining the emigration-accompanied changes in the rural sector. Furthermore,

Table 8. Private remittances into YAR (1970-1984)^a

Year	Remittances (YR million)	As a Percentage of GDP	As a Percentage of Imports	As a Percentage of Exports
1970	112	9	32	487
1972	564	31	114	1343
1974	1013	37	109	791
1976	4561	92	244	2552
1978	5595	68	124	2312
1980	6034	51	71	751
1982	5361	37	49	368
1984	5666	32	63	453

^aIMF, 1987; Central Bank of Yemen "Annual Report," different issues; CPO, 1985.

remittances have affected the economy of YAR through its effects on the macroeconomic variables such as consumption, savings and investment, in both public and private sectors and the trade and financial position of the country. These variables, which represent the demand side of the economy, in addition to the supply variables which were discussed before, have gone through dramatic changes since the flow of workers' cash remittances began to increase in the early 1970s.

The effects of remittances on private consumption occurs because of their effects on individuals' incomes and their propensity to invariably consume imported goods. Remittances contributed to fueling an upswing in imports by providing the foreign exchange, the typical constraint of importation.

Figure 2 depicts the increase in private transfers and both government and private consumption. Private transfers (which consist mainly of migrant remittances) as well as government and private consumption have increased considerably since 1970. Transfers reached their peak in 1976 and began to level off thereafter (in real terms). However, government and private consumption continued to rise because consumers tended not to decrease their level of consumption simultaneously with their declining incomes from remittances. The figures indicate some correlation between both government and private consumption and private transfers.

In addition to the impact of remittances on consumption, it has a remarkable impact on aggregate saving and investment. Owing to the fact that the economy has experienced negative gross domestic savings (see Figure 3), remittances have played an important role in maintaining positive gross national savings, hence providing some investable funds. In Figure 3, private transfers are plotted with gross domestic and national savings and gross investment for the period 1970-1984. The peak of private transfer accompanied a peak in national savings and investment (with a one-year lag) and a maximum negative domestic savings. The

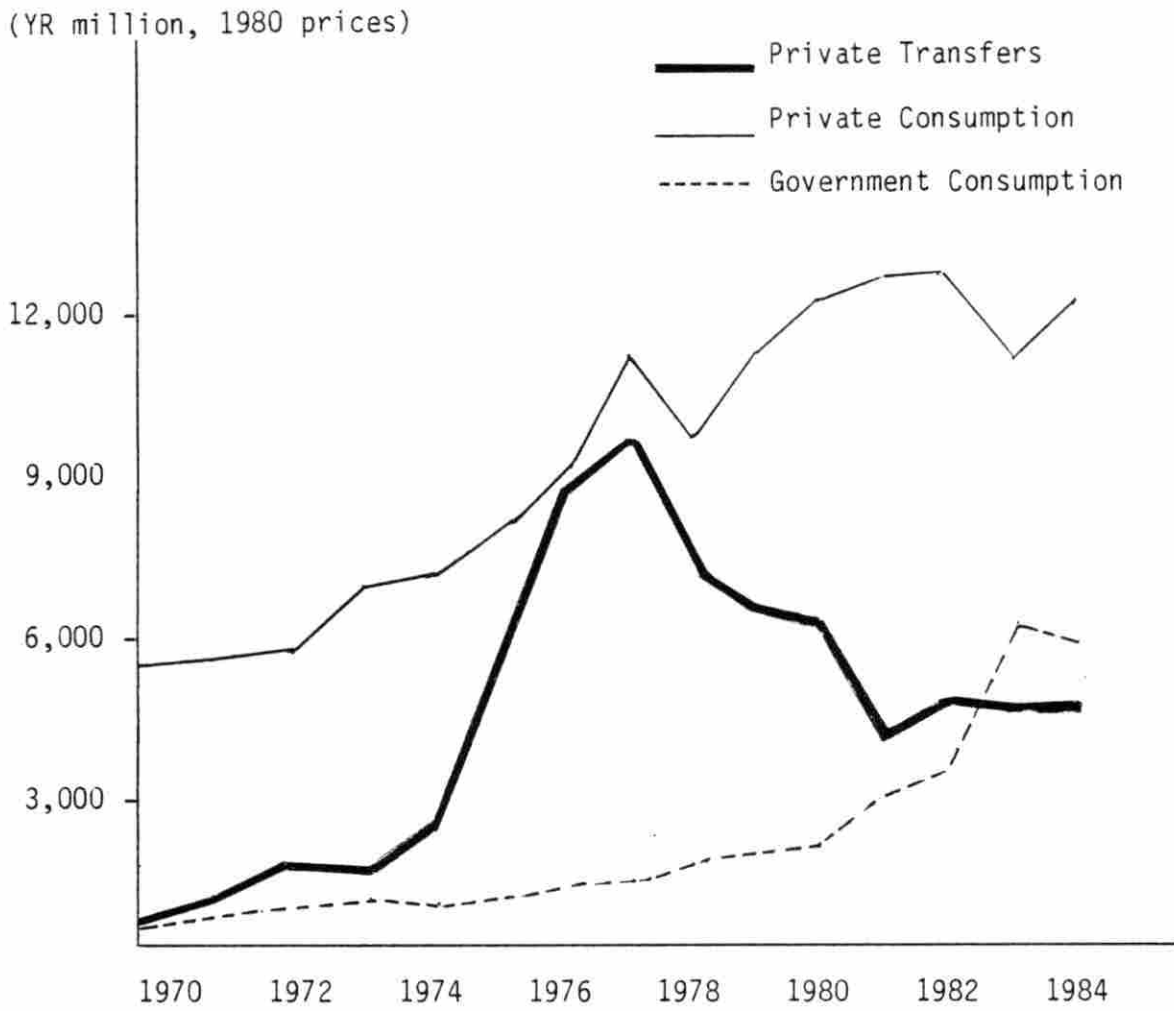


Figure 2. Private transfers, private consumption and government consumption (1970-1984)
 (Based on data from IMF, 1987 and Central Bank of Yemen, Annual Report, different issues)

latter can be explained by the remittances-induced consumption increase previously discussed.

We should remember that the connection between gross investment and national savings is not a one-to-one relationship. Many of the investments are carried out by the public sector and financed by foreign aid and loans. The disaggregation of investments into private and public is performed in our statistical analysis in the next chapter. There the relative importance of remittances for gross national investment will be more apparent.

The remittances-induced rise in consumption and investment is satisfied mainly by imported goods. Imports of both consumer and capital goods have increased considerably since 1970.

As indicated in Figure 4, both imports and private remittances have increased until 1977, when remittances began to decline. Imports, however, continued to increase, reaching their peak in 1982. The balance of payments was positive despite the considerable increase in imports and the reported huge trade deficit (CPO, 1985). This was mainly because of the increase in remittances. However, YAR registered a large deficit her balance of payments in 1979 as imports unrestrainedly continue to increase and remittances began to decline. Note that exports are negligible and therefore are not included in the analysis.

(YR million, 1980 prices)

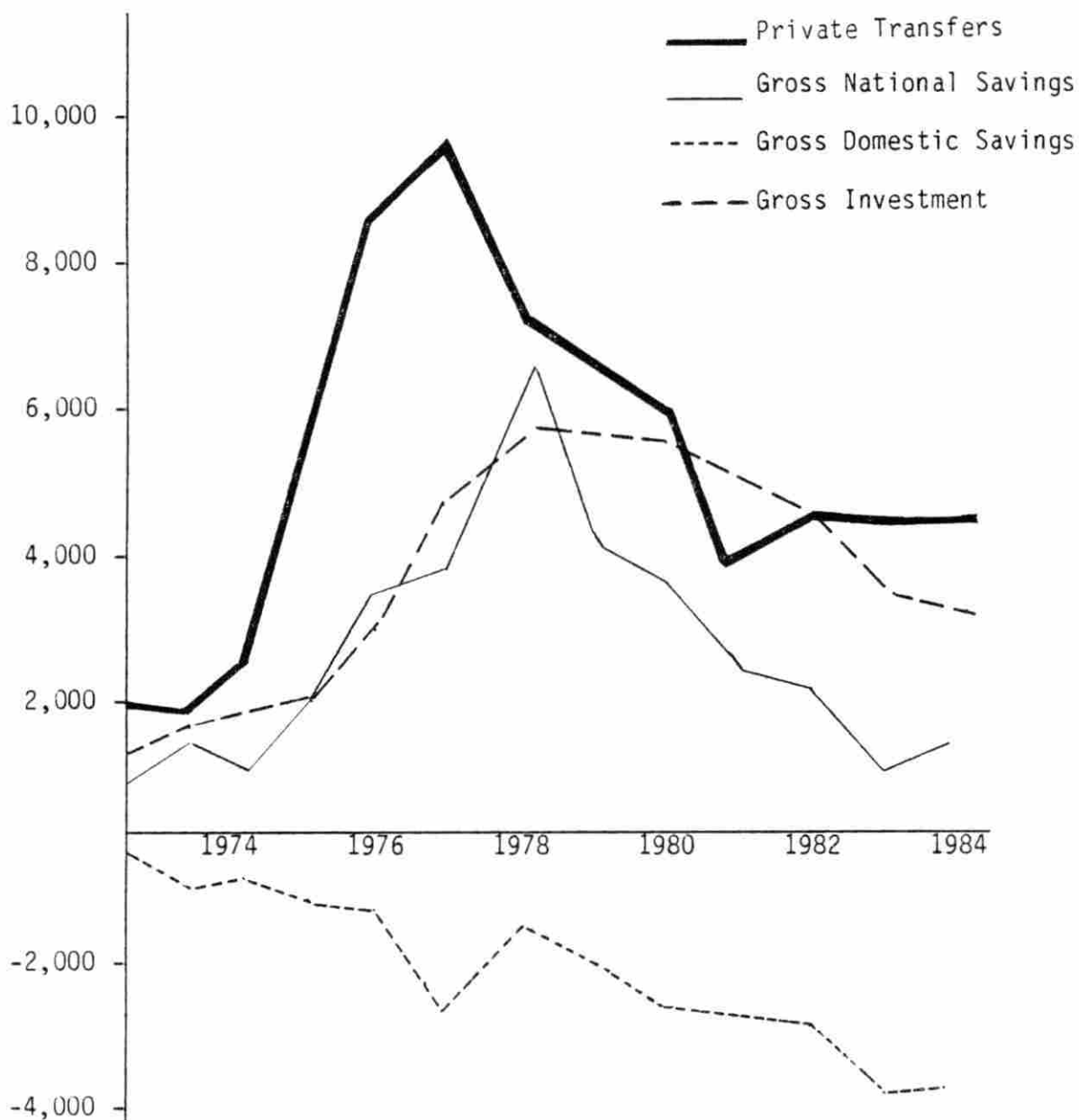


Figure 3. Private transfers, savings and investment (IMF, 1987; CBY, Annual Report, different issues)

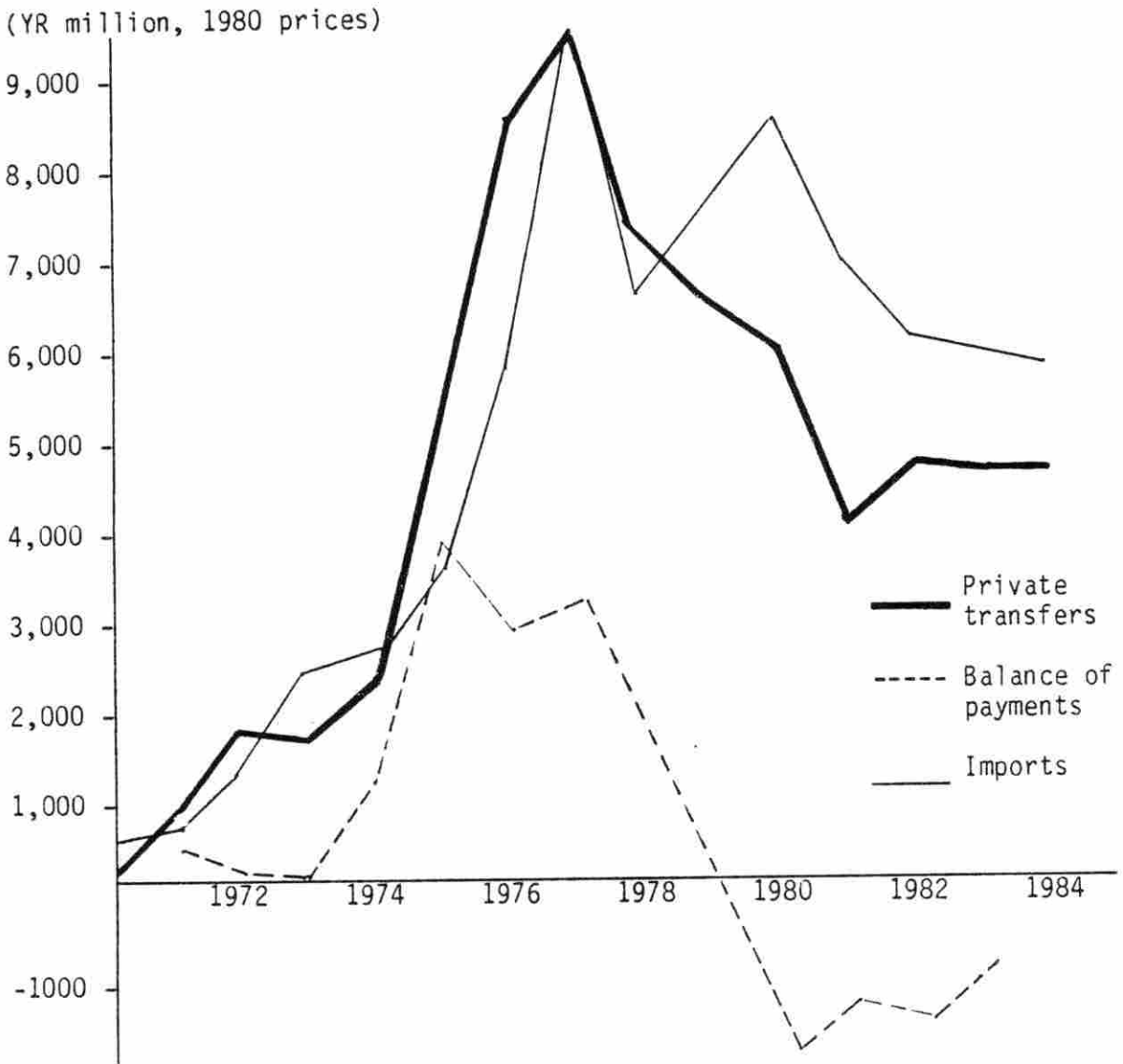


Figure 4. Private transfers, imports and balance of payments (1970-1984) (Based on data from Central Bank of Yemen Annual Report, different issues)

4.3 Remittances and inflation

The issue of the role of remittances in the inflationary prices in YAR is very important. Between 1972 and 1985, average annual inflation rate has been at 28%. High liquidity has been a major factor driving prices up and causing a demand-pull inflation where domestic production could not satisfy the increased demand and import bottlenecks have been experienced. Port congestion had been very popular in YAR throughout the entire 1970s. This has led to higher costs of imported goods pushing inflation rates even further.

Remittances are a major contributor to the high money liquidity and a direct factor of the excessive imports demand. However, high inflation rates have also been fueled by the direct effect of inflating prices in the international markets. YAR imports most of its consumption and capital needs from the world markets. The increasing oil prices since the early 1970s and up to the early 1980s have driven prices up in the international market and hence the domestic markets of YAR.

In addition to the effect of world prices on the domestic prices, the fact that most of goods sold in the country's markets are imported have led to the value of the exchange rates playing a major role in determining domestic prices. For example, the devaluation of the Yemeni Rial that took place in 1985 have led to a higher inflation rate than a year before where the price index rose by 27% in 1985 compared with 13% in 1984 according to the Central Bank of Yemen (note also that the Yemeni Rial had been pegged to the U.S. dollar most of the 1970s and up to the

early 1980s. The low value of the U.S. dollar during that period led to higher inflation rates in YAR).

One other, most important, factor that has been affecting the price levels is the government spending and deficit financing. Government expenditures have grown by an average annual rate of 36% between 1970 and 1982. Combined with an inefficient revenue generation, the budget deficit rose from YR 254 million in 1970 to YR 5500 million in 1982 (Central Bank of Yemen).

5. THE ROLE OF REMITTANCES IN THE ECONOMY OF YAR: SOME IMPIRICAL EVIDENCE

In the previous chapter, emigrants' remittances were shown as being one of the major emigration-related developments in the economy and society of YAR. It is illustrated how remittances affect the different economic variables and induce changes in these variables. Remittances affect consumption, saving, investment and the external sector represented by the trade and financial position of the country. This chapter investigates these relationships using regression analysis. Before the regression analysis is performed, a theoretical economic model is constructed in section 5.1. Then regression equations are fitted and coefficients of different variables are estimated in the following sections.

5.1 Structure of the model

A demand-side macroeconomic model is estimated. The lack of adequate data does not allow to specify a supply system. Data on interest rates are not available and an active capital market is absent in YAR. This precludes the inclusion of the financial sector of the economy (the assets market). Therefore, the demand system is based on a goods market equilibrium.

5.1.1 National accounts identities National accounts identities include three identities: Gross Domestic product (Y); Gross National product (Y_N); and National disposable income (Y_D). The first

identity:

$$Y = CP + IP + G + (X-M) \quad (1)$$

states that demand on GDP (Y) is allocated between private consumption (CP), investment (IP), government expenditure (G) and net exports (X-M). However, in the case of YAR and many other developing countries, government sector plays a role of consumer as well as investor. Hence, it is reasonable to disaggregate government demand to government consumption (CG) and government investment (IG), i.e.,

$$G = GC + GI \quad (2)$$

hence,

$$Y = CP + IP + CG + IG + (X-M). \quad (1^a)$$

Gross national product (Y_N) consist of gross domestic product and net factor income from abroad (NFI),

$$Y_N = Y + NFI \quad (3)$$

The third national income identity is the national disposable income (Y_D). It consists of the gross national product (Y_N) plus net current transfers from abroad (NCT) minus consumption of fixed capital (λ),

$$Y_D = Y_N + NCT - \lambda \quad (4)$$

The main components of NCT are the private net transfers (TRP) and official transfers (TRO),

$$NCT = TRP + TRO. \quad (5)$$

5.1.2 The private sector Demand of the private sector includes demand for consumption (CP) and demand for investment (IP),

$$CP = f(Y_D, T_1, N). \quad (6)$$

Equation 6 expresses total private consumption as a function of national disposable income and direct income tax (T_1). In addition, private consumption is affected by the size of the population. Therefore, population variable (N) is added to the consumption function.

A traditional investment function expresses investment as a function of the interest rate,

$$I = f(r) \quad (7)$$

However, as has been indicated earlier, this relationship is not applicable to the case of YAR. In this case since investment is income minus consumption (assuming savings are equal to investment) we may write

$$IP = f(Y_D, T_1, N) \quad (8)$$

5.1.3 The public sector As indicated before, the public sector in YAR acts as both a consumer and investor. The government demand depends on its revenues and transfers. Revenues are a function of national disposable income and hence,

$$CG = f(Y_D, T_1, T_2) \quad (9)$$

$$IG = f(Y_D, T_1, T_2) \quad (10)$$

where T_2 is indirect tax.

5.1.4 The foreign sector Net exports of goods (X-M) are a function of national disposable income (equation 4) and population,

$$m = f(Y_D, N) \quad (11)$$

where $m = X-M$ (net exports).

5.1.5 The complete demand side model

$$(i) \quad Y = CP + IP + CG + IG + m$$

$$(ii) \quad Y_N = Y + NFI$$

$$(iii) \quad Y_D = Y_N + TRP + TRO - \lambda$$

$$(iv) \quad CP = f(Y_D, T_1, N)$$

$$(v) \quad IP = f(Y_D, T_1, N)$$

$$(vi) \quad CG = f(Y_D, T_1, T_2)$$

$$(vii) \quad IG = f(Y_D, T_1, T_2)$$

$$(viii) \quad m = f(Y_D, N)$$

the endogenous variables are Y , Y_N , Y_D , CP , IP , CG , IG and m , and the exogenous variables are NFI , T_1 , T_2 , N , TRP , TRO and λ .

Five reduced form equations are implied from the structural part of the model (equations iv-viii); each endogenous variable is expressed as a function of the exogenous variables. The study focuses on the effects of the exogenous variables (particularly TRP) on GDP, consumption, investment and import demand functions.

5.2 The regression model

A linear multiple regression model is used to estimate the reduced form equations of interest. Regression equations are fitted to the data to study the relationships under investigation. Some exogenous variables (and NFI) are excluded from the regression equations as their exclusion improved the estimation. In addition, indirect taxes (T_1) are not included in the equations because they are still relatively insignificant compared with other variables affecting private and public demand.

5.3 Data

As always the case with less developed countries, one is faced with a host of difficulties in finding adequate and reliable data that are

sufficient to conduct comprehensive research about YAR. Data collection in YAR has started as late as 1970. For the regression analysis, secondary data gathered from different resources, mainly Central Planning Organization (CPO), Central Bank of Yemen (CBY) are used. In addition, published data of the international organizations, like the IMF and World Bank are main sources of data about YAR. The data were deflated by the implicit GDP deflator at 1980 prices.

5.4 Results

The five equations of interest were fitted to the data using the method of least squares. Results are summarized in Table 8. The estimated coefficients obtained for remittances (TRP) are significant in all equations, except public investment (IG), at a 1% and 5% significance levels. The coefficients indicate a positive correlation between remittances and all the dependent variables except CG (equation 4). The coefficient of remittances with the government consumption is negative and inconsistent with expectations. On the other hand, the most significant factor in explaining government consumption is indirect taxes (T_2) which consist mostly of custom duties on imports. Since imports (M) are highly correlated with private transfers (equation 6, Table 8), the inconsistent sign of TRP coefficient with respect to government consumption might be a result of multicollinearity between T_2 and TRP (through M). Finally, note that the exclusion of N from IG, CG and M improved the estimation of these equations.

Table 8. Summary of the estimated regression coefficients (1970-1984)^a

Dependent Variable	Intercept	TRP	TRO	N	T ₂	r ²
1. Y	-13194 (-26.6)	0.05 (2.6)*	0.11 (1.29)	3.50 (38.1)**		.99
2. CP	-8009 (-4.9)	0.27 (3.4)**	0.49 (1.7)	2.38 (8.4)**		.95
3. IP	-1483 (-1.0)	0.13 (2.2)*	0.31 (1.1)	0.30 (1.0)		.72
4. CG	-949 (-1.4)	-0.41 (-2.6)*	0.32 (0.5)		3.60 (4.8)**	.87
5. IG	-727 (-1.7)	0.004 (0.01)	0.84 (2.1)*		0.62 (1.5)	.74
6. M	79 (0.1)	0.38 (2.2)*	2.50 (4.1)**			.75

^aNumbers in parentheses are t-statistics. Coefficients with significance level of 5% are indicated by an "*" and of 1% are indicated by "**".

5.5 Remittances and savings

The role of remittances in the economic development of YAR is further analyzed in this section using a saving function approach. Remittances contribute to the accumulation of savings. The Harrod-Domar model of economic growth regards savings as having a major role in the

growth of the economy (Branson, 1979). If we define growth (g),

$$g = \frac{dY}{Y}$$

where Y is national income, then dividing numerator and denominator in the right-hand side by I (investment) and rearranging,

$$g = \frac{I/Y}{I/dY}$$

But $I/Y =$ average savings ratio (s) (Assuming that $S=I$, and $I/dY =$ incremental capital output ratio (k), therefore

$$g = s/k$$

and hence, the model concludes, savings affect growth directly and increasing the saving ratio will further growth of the economy.

A regression model was fitted using the data of national and domestic savings in YAR. Estimates of the regression coefficients are obtained and summarized in Table 9.

Table 9 shows a negative correlation between remittances (TRP) and domestic savings (SD). On the other hand, at a very significant level, remittances are positively correlated with national savings. An increase in remittances by one percent induces a 0.62 percent increase in national savings (other things held constant). Therefore remittances contributes to the economic growth of YAR through its contribution to the national savings (and hence investment).

Table 9. Estimated Regression coefficients for the savings equations (1970-1984)^a

	Dependent Variable	Intercept	TRP	TRO	N	r ²
1.	SD	6157 (3.8)	-0.01 (-0.12)	-0.13 (-0.5)	-1.17 (-3.9)**	.84
2.	SN	5331 (4.08)	0.62 (9.7)**	0.44 (1.8)*	-0.97 (-4.3)**	.92

^aNumbers in parentheses are t-statistics. Coefficients with significant level of 5% are indicated by an "*" and those with significant level of 1% are indicated by "**".

6. SUMMARY AND CONCLUSIONS

Having occurred for centuries, migration from Yemen began a new era with the oil boom in neighboring countries in the early 1970s. Hundreds of thousands of Yemeni workers were driven by their need to leave YAR seeking better job opportunities in the oil states. It is the combination of the push and pull factors that led to the tremendous flow of people from YAR. The new emigration behavior has been temporary in nature: workers usually emigrate many times for short periods.

The contemporary labor migration from YAR has resulted in wide ranging effects on the social, political and economic structure of the country. This study concentrated on the economic aspects of the labor outflow and its effects on the growth and development of the economy. The general hypothesis is that labor outflow from YAR has had an overall negative impact on her economic development. Most previous studies on the subject drew this conclusion in one way or another.

In this analysis, the effects of labor emigration on the economy are discussed by considering the effects of new ideas and attitudes that have emerged through returnees; the impact of labor outflow on supply and level of skills; how employment and output have responded to the withdrawal of the agricultural labor force; and what effects remittances had on different economic variables. Some major conclusions follow from the analysis and are presented and summarized in this chapter.

The temporary labor emigration has been associated with an inflow of new ideas and attitudes with the returning migrants. These may include the emergence of an unprecedented conspicuous consumption, new production patterns and new social attitudes. While consumption in general is an indicator of the people's well-being, the percentage of increase in consumption that resulted from the introduction, by returnees, of new conspicuous consumable goods that are imported should be regarded as harmful to the economy. However, the introduction of new production patterns, though limited, leads to increasing productivity and hence contributes to the economic growth of the country.

In addition to the economic ideas that returned migrants bring back to their society, they return with new ideas and attitudes that have contributed to forming new political and social structures. The implications of these on the society are wide and deep but their analysis should be of interest to sociologists.

The second item in our discussion was the impact of labor emigration on the domestic supply and level of skills available. In this regard, the conclusion is that the "brain drain" from YAR is insignificant. In addition, despite the original generally low skill level of the Yemeni emigrants, there has been an influx of new skills into the country. Emigrants acquired many new skills that have contributed to the development of the national economy of YAR. The economic growth that YAR has experienced would have been difficult to achieve without the presence of these skills.

Turning to the issue of the effect of labor emigration on employment and (agricultural) output, the main conclusion is slightly different from the findings of the previous studies. This study shows that while there have been symptoms of an acute shortage of labor supply in agriculture, there is little evidence that the direct labor outflow to the neighboring countries explains this shortage. Rather, migrant remittances have contributed to the creation of a situation where labor seems to be available but not active. In addition, the development of the modern sector and the structural transformation inside the traditional sector have contributed to increasing the total labor demand, explaining some labor shortage indicators. The shortage in the modern sector is more of skilled than unskilled labor (World Bank, 1979). This implies that labor emigration contributes to the relief of this shortage in the modern sector through the learned skills abroad.

The most significant aspect of temporary labor migration from YAR is the inflow of large pecuniary and in-kind migrant transfers. This study suggests that migrant remittances explain many developments that have been otherwise thought of as a result of the labor outflow from the country. To a wide extent, effects of remittances explain the scarcity of an active labor force, the stagnation of agricultural growth and the negligence of marginal agricultural land. In addition, the change of the structure of agricultural production by the increasing replacement of traditional crops by cash crops is also largely explained by the income effects of remittances. This is to say that scarcity of labor hardly

explains these changes since cash crops (like vegetables) are mostly more labor-using than food (traditional) crops.

The importance of remittances is not limited to their unfavorable effects on agricultural development. Remittances have been a major factor affecting the overall process of economic development through their impact on aggregate consumption, savings (or investment), and hence gross domestic product. Furthermore, remittances affect the external trade and financial positions of the country through their indirect impact on imports and their contribution to the balance of payments (and foreign exchange availability).

The empirical evidence indicates a close relationship between the variability of the migrant transfers and other economic variables. The evidence presented indicates that remittances have been a major factor that explains the increase in both consumption and national savings during the period 1970-1984. As remittances spurred consumption, expending more than could be domestically supplied, domestic savings have decreased during the same period. National savings, however, have increased due to the inflow of remittances, and more funds became available for investment. This partially explains the impressive growth of gross domestic production during the last 14 years (the average annual growth rate the real GDP between 1970 and 1984 was 8%).

While the role of savings and investment in economic growth is positive, consumption spending is often thought of as a minor contributor, if at all, to the development of the country. Furthermore, the increase in consumption, especially of imported goods, adversely

affects both domestic and national savings. The importance of migrant remittances in enhancing the increases in consumption and savings has been emphasized. The only point that needs to be clarified is that consumption is not, in general, a waste as many writers have implied. In a country such as YAR where per capita income is still very low, increases in consumption indicates the satisfaction of the basic needs of food, clothing and shelter for the people. Consumption may stimulate domestic production and hence improve per capita income. Though a large proportion of migrant remittances has been spent on the purchase of consumer goods (which is a natural result of the low level of income), an indication of a high marginal propensity to consume, important sums have been saved and invested.

The increase in both consumption and investment demand and the inability of domestic production to satisfy this demand has led to a skyrocketing increase in imports. As a result, needs of foreign exchange to finance these imports have increased considerably. In this regard, the flow of foreign exchange from migrant earnings has contributed significantly to the alleviation of the foreign exchange bottleneck and allowed the importation of not only consumption goods but also development needs. In addition, the effect of remittances on the balance of payment has been very favorable. Without remittances, and with very few exports, it is difficult to imagine how the problems of foreign exchange and balance of payment would have been resolved during the last one and a half decades.

The issue of the role of remittances in the generation of high inflation rates has been discussed in the main text. Despite the role of remittances in promoting demand-pull and cost-push inflation, other equally important factors should be considered. These include the effect on domestic prices of international inflation through imports. In addition, government expenditures and the growing budget deficit have also been a major factor in the inflationary process. Furthermore, effects of exchange rates on the price levels are very important since imports are the major component of the aggregate supply.

In summary, temporary labor migration from YAR has had a wide range of effects on her economic development. By examining the relationship between labor emigration (and remittances) and key macroeconomic variables, it is clear that the export of labor from and the flow of remittances into YAR have had a positive as well as negative impact on the growth of the national economy. However, with the empirical evidence and observations of the economic performance throughout the period under investigation, it seems reasonable to conclude that the advanced hypothesis of an overall negative impact of emigration on the development process is not adequately substantiated. Rather, there has been a satisfactory (if not impressive) economic growth beginning in the early 1970s.

GNP per capita increased from less than U.S.\$100 in 1970 to U.S.\$550 in 1983. Social welfare has improved substantially and most basic needs have been satisfied. The role of labor emigration and the accompanying inflow of skills and remittances cannot be disregarded.

It should be borne in mind that these findings are confined to the period under investigation. To have a whole picture of emigration effects, long-term effects should be considered. The most important is the increasing dependence on migrant remittances. Remittances are temporary, unreliable, and subject to fluctuations due to the economic climate in the host countries and the state of the relationship between sending and receiving countries. Hence, care should be taken to minimize this dependency and maximize a productive use of these remittances as long as they continue to flow.

6.1 Policy implications

Despite the overall favorable impact of labor emigration on YAR's economic development in the last 14 years, more benefits could have been derived given appropriate government measures. There has been a "laissez-faire" approach toward both labor outflow and the associated inflow of remittances. The policy of non-intervention has helped to magnify the negative results of labor emigration and minimize positive ones. While it is understandable that direct intervention might have adverse outcomes, some governmental policies are necessary to encourage the positive aspects of emigration and minimize its harmful consequences. Some of these policies are outlined in the following:

- (1) The establishment of the appropriate financial institutions to absorb the cash surplus that results from remittances and direct them into productive investment. This would also help to minimize the inflationary effects of remittances. It is

true that migrants spend more on consumption simply because of a lack of investment opportunities, especially in the rural areas.

- (2) Conspicuous consumption that results from the inflow of remittances can also be discouraged by limiting imports of luxury items. Some measures in this direction are already in effect. They include the ban of and/or high tariffs on these items. However, the long borders with neighboring Saudi Arabia make the implementation of these policies impossible without joint efforts of the two countries.
- (3) Substantial sums of remittances, in the form of consumption goods and durables have flowed across the borders. This undermines the foreign exchange benefits that could have been gained had these been cash remittances. Therefore, policies that limit or discourage this kind of transfer would definitely multiply the favorable effects of remittances. Some government measures in this regard may include high tariffs or prohibition of these kinds of transfers.
- (4) Most of the cash remittances have occurred through informal channels, like expatriate agents. These channels usually drive away foreign exchange earnings from the proper use and expose migrants to exploitation of these agents. The government needs to take steps toward directing cash transfers through the formal financial institutions to avoid these disadvantages.
- (5) Migrants usually benefit from their absence more than the

society does. They also benefit from all public services that are provided by the government. Yet, they contribute less to the costs of these services than non-migrants do. Hence it would be fair to levy a tax on them and use the income generated to run and improve these services. However, to avoid discouragement of remittances flow, taxes should not be imposed on migrant's income or transfers but according to his absence (passport fees would be the easiest to implement).

- (6) Some measures should be taken to protect the skilled returnees from competition of imported cheap skilled labor as long as migrant skills are sufficient to satisfy development needs.
- (7) Unlike guest workers in Europe, immigrants in the Middle East oil-exporting countries are denied any job security or end-of-service benefits. After harvesting the fruits of their productive life, it is usually left to the home country to bear the migrants' expenses during retirement. In addition, immigrants are exposed to job insecurity and inhuman treatment. While economic needs give the host country a powerful advantage, international attention should be directed to this problem. In the national context, bilateral negotiations and the goodwill of the host countries should play an important role.
- (8) The past experience of development planning did not pay much attention to the problems associated with labor emigration. More consideration is needed in the future of the benefits and

disadvantages that can enhance or hinder successful planning. Collection and analysis of migration data is crucial to planning if emigration is assigned the role that it deserves.

6.2 Study limitations

As always the case with studies conducted about developing countries, researcher is faced with the scarcity of data. Data collection in YAR is still in its primary stages. The absence of data about many variables have precluded the inclusion of these variables in this work. The availability of such data would definitely have improved this analysis.

Due to the data hinderance, more field work about emigration is required. Swanson (1979) and Meyer (1985, 1986) have taken the lead in this regard. However, many aspects of labor emigration need to be discussed. The effect of emigration on the supply side of the economy might be a subject of future research. This will require great efforts in data collection about the supply variables and emigration data; the latter being the responsibility of the government and planning authorities.

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