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The Hidden Economy: A New View of Remittances in the Arab World

NAZLI CHOUCRI*
Massachusetts Institute of Technology, Cambridge, Massachusetts

Summary. — The hidden economy is set in place by the large-scale migration of labor in search of employment outside national boundaries. Remitted earnings, channeled largely through informal mechanisms, have generated a network of financial and economic relations that define the boundaries and characteristic features of the hidden economy. The hidden economy shapes many of the critical parameters of economic activity of the Middle East, such as exchange rates and the availability of foreign exchange. It is difficult to observe (or measure) workings of this important phenomenon, since, to a large extent, it operates through unofficial, informal, or illegal transactions. Special emphasis is given to the cases of Sudan and Egypt to illustrate the operations of the hidden economy and to identify its agents and characteristic features.

1. INTRODUCTION

Since the events of 1973 the political economy of the Arab world has been shaped almost entirely by oil and oil prices. Attention to the region's development had centered principally around petroleum-related issues — for both the oil-exporting and the oil-importing countries. Less well understood is the hidden economy, an economy built by large-scale capital flows across national boundaries, mostly unrecorded, and to a large extent escaping the accounting procedures of the formal economy. This economy has remained hidden largely because the points at which its transactions surface, such as black market operations of unrecorded entry and exit of goods, are illegal, and therefore do not appear in the economy's formal record. Even legal transactions based on unrecorded capital inflows may not leave clear traces.

In the labor-exporting countries of the Arab world, among the largest sources of capital for the hidden economy are the remitted earnings of nationals working temporarily abroad in the oil-rich Gulf countries. The phenomenon of labor migration and the attendant issue of remittances within the Arab world have already received a great deal of attention.[1] What remains unclear, however, is the true magnitude of remittances and their broader macroeconomic impacts.

Formally recorded remittances are only the tip of the iceberg. The size of that which remains submerged is not known. Furthermore, the observed effects of the hidden economy on the economies of certain states in the region are not consistent with conventional views of macroeconomic effects of remitted earnings.[2] There are, furthermore, some institutional features that have not been appreciated to date.

The purpose of this article is to outline some of the most obvious aspects of the hidden economy brought on by the oil price increases that initiated and shaped investment patterns and stimulated the attendant demand for labor in the oil-rich economies of the Middle East. This labor migration, in turn, has created a set of economic and financial relations that have escaped formal accounting procedures. The unrecorded capital flows, which are large in magnitude, may well have created effects that differ from those capital flows that are recorded and conventionally accounted for as remittances. When predominantly informal channels are used for these transfers, government has no access to the foreign exchange and government policy may be severely constrained. Further, when the true magnitude of the productivity of nationals abroad remains imprecisely known, the result may be a distorted view of macroeconomic

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parameters. The "hidden economy" will refer here strictly to the structure of transactions generated by unrecorded capital flowing across national boundaries due to employment of nationals overseas.[3]

The hidden economy is most starkly illustrated in those states of the Arab world where labor migration across national boundaries is a salient feature of the formal economy, and the attendant capital inflows are largely unrecorded. For purposes of illustration, we will focus on two such cases — Egypt and Sudan. But they are not idiosyncratic: they simply manifest ways in which conventional perspectives on migration and remittances cannot explain or illustrate the idiosyncracies or anomalies that emerge.[4] These include a deterioration of the exchange rate and of the balance of payments, in conjunction with massive capital inflows which should, by contrast, strengthen the local currency and improve the country's balance-of-payments position.

2. THE DIMENSIONS OF LABOR MIGRATION IN THE ARAB WORLD

The hidden economy, set in motion by the migration of labor for employment across national boundaries, is sensitive to the volume and composition of this migration. Despite major efforts in the Arab world and elsewhere,[5] there is a continuing uncertainty about the number of migrants involved, the nature of their employment, and countries of destination. Some of this uncertainty is due to the difficulties inherent in obtaining accurate numbers. However, the major reason for continuing ambiguity lies in the fact that *the phenomenon itself is changing*.[6] Elsewhere we have documented this proposition by laying out the "decade of mobility" in the Arab world and highlighting its features:[7] the phenomenon of labor migration across state borders in the Middle East has evolved through at least five distinct but not mutually exclusive phases.[8] In order to understand the hidden economy it is important, therefore, to appreciate the changing characteristics and scope of this underlying mobility.

The first phase in Arab migration began during the interwar period and ended with the events of October 1973. It was characterized by two traditional types of movement. Egyptians (and to some extent Jordanians) migrated to other Arab countries, principally as teachers and administrators, staffing the administrative framework of Gulf states. Their small numbers made control of this migration possible since it required minimal organization and regulation by the governments of both sending and receiving states. In many instances migration was, at the time, *a formal instrument of foreign policy*, implemented through individual secondment and official state-to-state missions. Prior to 1973 there was some migration of unskilled workers for work in the service and construction sectors of various states.[9] Examples include the movement of Yemenis to Saudi Arabia and of Sudanese to Egypt. The movement of Palestinians, which also predated 1973, demands separate treatment since their plight represents a nonvoluntary movement, the result of violence and coercion. Yet this refugeeism subsequently became a cornerstone of the migrant communities in many labor-importing countries. In this first phase, most of the migrant workers originated from other Arab states, and no single migrant group dominated the labor force of any one labor-receiving country, with the exception of the 200,000–250,000 Yemenis working in Saudi Arabia. Together with an estimated 94,000 Egyptians, 92,000 Syrians, and 71,000 Palestinians, they represented the majority of the half million Arabs working abroad at the time.[10]

The second phase was set in motion by the oil price increases of 1973. Arab countries experienced large-scale adjustments in their national labor forces and a general expansion of economic activity. The stock of expatriate workers expanded to 1,800,000 between 1970 and 1975, with most of the increase occurring in the last two years. Both the labor-importing and exporting states found that growing demand for labor taxed the minimal regulatory policies and mechanisms in place. At the same time, sending states eagerly sought to encourage rather than constrain the export of labor. Supply readily responded to demand. In retrospect, this period can be seen as one of effectively *unregulated market-determined labor movements*. While this period was particularly dynamic for the political economy of the Arab world, the equilibrium in the regional labor force proved transitional.

A third phase of interstate migration in the Middle East evolved through the latter part of the 1970s. Arab workers continued to migrate, but the Gulf states began to recruit large numbers of South Asian workers.[11] Indians, Pakistanis and, to a lesser degree, Bangladeshis increased their presence. As early as 1975, Indians and Pakistanis accounted for 18% of all migrant workers. The large-scale entry of Asians into the labor markets of the Middle East was a response to the magnitude of the demand for migrant workers, challenging the position of the traditional "foreign" labor, from other Arab states. From less than 200,000 in 1975, the

number of Pakistanis working in the Middle East climbed to 500,000 in 1977; by 1979 the figure reached 1.25 million.[12] The number of Egyptians working in other Arab countries also continued to grow, from 330,000 to 400,000 in 1975, to 600,000 in 1976, to 1,365,000 in 1978. Specific numbers aside, the trends indicate that the magnitude of migration was much greater than indicated by reports based on data collected in 1975 by the World Bank and the International Labor Office.[12] For example, North Yemen managed to increase its export of workers to 500,000 or more by 1977. *Asians were now almost as numerous as Arabs in the foreign workforces of the region.*[13]

By this time the Gulf states had — to differing degrees — initiated various policies designed to deal with the influx of foreigners and to control the extent to which different nationality groups interacted with the host societies. For example, Saudi Arabia decided to enforce its border crossing procedures strictly, thus constraining the flow of Yemenis into the country. Arab sending states also began to try to organize policy responses to counter the observed negative effects of migration, including growing shortages of skilled manpower and the failure to attract a large enough share of worker remittances. This phase, then, marked the beginning of the politicization of migration in both sender and receiver countries.

A fourth phase crystallized by the end of the past decade, characterized by a growing *complexity in Asian labor*: Koreans, Taiwanese, Filipinos and others began to appear in great numbers, in the Gulf and elsewhere.[14] At the same time, governments in both sending and receiving countries assumed a much more active role in managing the migration process. The number of East Asian workers in the Middle East from China, Taiwan, and Indonesia, while small in terms of absolute numbers, nevertheless grew in importance. Together with workers from South Korea, the Philippines, and Thailand, they represented the expansion of labor from East and Southeast Asia into the Middle East.[15]

During this fourth phase, mobility was characterized by its sheer magnitude relative to national labor markets. Almost every state in the region was participating in the migration process. In the Gulf states alone there may have been some 3.5 million–4.65 million migrants, in a combined labor force of 9 million–10.2 million workers. (By this count migrants constituted about 40–46% of the labor force.) The governments of these states *could no longer refrain from policy intervention.*[16]

The labor importers revealed, and articulated, an increasing uneasiness with the size of their expatriate work forces. They began urging, if not forcing, migrants to return home upon completion of their contracts. Visa, residency, and citizenship laws were strengthened and pressure was put on the business sector to adhere to recruitment and employment procedures. South Korean work camp projects were seen as an attractive alternative to expanding the expatriate communities already in place, while at the same time minimizing the visibilty of the foreign workers.

A fifth phase in migration of labor appears to be emerging in the mid-1980s: a period of stabilization in the total number of migrants. Whether a decline will set in, as many suppose, or demand for migrant workers will grow, as some argue, remains to be seen.[17] The migration process at present appears to be characterized by a shift toward the import of more highly skilled labor; a concomitant shift in the sectoral allocation of labor from construction to industry and services, and a relatively small increase in the proportion of East Asian workers. In addition, traditional exporters such as Egypt are importing labor from Asia for construction activity and for the service sector.

Migration in the Middle East may well have reached a plateau at the present time relative to the mid-1970s. This is due in large part to structural change in the economies of the labor importers in conjunction with weakening financial surpluses and emerging political opposition to continued unbridled growth, motivated, in part, by the large numbers of migrants living in the host countries. The current downward slide in the price of crude petroleum accentuates these trends. But there are alternative assessments, based on calculations that presume investments set in place will generate a continued demand for labor as a critical input to economic performance.[18]

If the formally recorded remittances generated by migration across national borders represent only the tip of the iceberg of the hidden economy, what are its major features? Why does the formal economy inadequately represent the "true" economy?

3. REMITTANCES: THE CONVENTIONAL VIEW

The conventional view of the impact of migration and remittances begins with private capital flows, formally accounted as such in a country's balance of payments. The impacts of remitted earnings are then traced almost exclusively in terms of formally recognized effects on the real

economy, on its productivity and output. The conventional view of remitted earnings focuses on the formally recorded flows, their effect on labor markets, and the broader macroeconomic impacts.

Remitted earnings constitute the most visible consequences of migration for employment. Balance-of-payments statistics conventionally record such flows as "unrequited private earnings." Despite slight variations in accounting procedures, the standard procedures of the International Monetary Fund are accepted internationally. For illustrative purposes, Tables 1–4 present such data on remitted earnings for select countries of the Middle East, indicating volumes as well as size relative to other economic indicators. It is the magnitude of such flows, and their salience to the receiving countries, that has initially drawn attention to the importance of migrant workers as a source of foreign exchange earnings.

Table 1 shows the value of remittances flowing into select labor-exporting countries of the Middle East, and flowing out of select labor-

Table 1. *Remittances in select labor-exporting and importing countries** (*in millions of US dollars*)

Country	1973	1974	1975	1976	1977	1978
Export labor						
Sudan	6.3	4.9	1.5	36.8	37.0	66.1
Egypt	123.0	310.0	455.0	842.0	988.0	1824.0
N. Yemen	NA	135.5	270.2	675.9	987.1	910.1
S. Yemen	32.9	42.8	58.8	119.3	187.3	254.8
Jordan	55.4	82.0	172.0	401.8	420.8	468.0
Turkey†	1234.0	1466.0	1398.0	1104.0	1068.0	1086.0
Import labor						
S. Arabia	−391.0	−518.0	−554.0	−989.0	−1506.0	−2844.0
Bahrain	NA	NA	−227.6	−252.8	−300.5	−387.7
Oman	NA	−111.0	−208.0	−220.0	−222.0	−212.0
Libya	−273.0	−350.0	−260.0	−257.0	−856.0	−577.0
Kuwait	NA	NA	−276.0	−315.0	−370.0	−433.0

Country	1979	1980	1981	1982	1983	1984
Export labor						
Sudan	115.7	209.0	322.7	107.1	245.8	275.3
Egypt	2269.0	2791.0	2230.0	2116.0	3315.0	3611.0
N. Yemen	936.7	1069.5	777.4	911.4	1084.4	995.5
S. Yemen	311.5	347.1	406.2	429.7	436.3	479.3
Jordan	509.0	666.5	921.9	932.9	923.9	1053.3
Turkey	1799.0	2153.0	2559.0	2174.0	1549.0	1885.0
Import labor						
S. Arabia	−3365.0	−4064.0	−4100.0	−5211.0	−5236.0	−5284.0
Bahrain	−278.8	−282.8	−317.6	−331.4	−300.0	−345.7
Oman	−249.0	−326.0	−452.0	−684.0	−692.0	−819.0
Libya	−371.0	−622.0	−1314.0	−1597.0	−2098.0	−1544.0
Kuwait	−532.0	−692.0	−689.0	−702.0	−906.0	−855.0

Source: *IMF International Financial Statistics Yearbook*, December 1980, February 1983, December 1985.

*Note that the data presented here are for private unrequited transfers, which include workers' remittances as credits and debits, as well as migrants' transfers and other private transfers. Transactions involving unrequited transfers differ from exchanges in that one transaction provides an economic value to another transaction but does not receive a quid pro quo on which economic value is placed. This value that is lacking on one side is represented by an entry referred to as an unrequited transfer. (Source: *International Financial Statistics*, Supplement on Balance of Payments, No. 7 (1984), p. v.)

†Data on Turkey are included here because although Turkey is not an Arab country, it is in the Middle East geographically, and contributes to labor migration flows.

importing countries (with outflows indicated by a negative sign) according to official balance-of-payments statistics. Note that for labor exporters, the receivers of the largest remittance flows in 1983 were Egypt ($3.3 billion), Turkey ($1.5 billion), and North Yemen ($1.1 billion). Saudi Arabia and Libya are seen to be the sources of the largest outflows of remittances.

Remittances in Egypt are also prominent when viewed as a ratio to GDP (0.10), as is the case for North Yemen (0.28), and Jordan (0.27). (Here, as elsewhere, we cite data for the most recent year available, which varies in some cases as shown in the supporting tables.) See Table 2. For the labor importers, the ratio of remittances to GDP is less striking. (The negative sign has not been retained, but the reader is reminded that, for this, and the following two tables, remittances in the labor-importing countries are outflows.) When viewed as a ratio to exports, the importance of the value of remittances entering the labor-exporting countries is highlighted. For North Yemen, with the value of remittances several times the value of exports, labor emerges as the chief commodity of this country. For Jordan, the ratio of remittances to exports is 1.4, and is relatively high for Turkey (0.28), Sudan (0.39), and Egypt as well (1.03). This indicator shows such magnitudes for none of the labor-importing countries of the region. See Table 3. The value of remittances expressed as a ratio to imports is a useful indicator of the extent to which imports can be financed by foreign exchange remitted by workers abroad. This indicator is highest for North Yeman (0.60), but also bears attention for Jordan (0.38), Egypt (0.32), Sudan (0.18), and Turkey (0.16). See Table 4.

In the Middle East the formal record grossly

Table 2. *Ratio of remittances to GDP in select labor-exporting and importing countries*

Country	1973	1974	1975	1976	1977	1978
Export labor						
Sudan	0.0025	0.0014	0.0003	0.0069	0.0055	0.0086
Egypt	0.0133	0.0289	0.0364	0.0525	0.0471	0.0730
N. Yemen	NA	0.2177	0.3267	0.6249	0.6943	0.5051
S. Yemen	NA	NA	NA	NA	NA	NA
Jordan	0.0833	0.1066	0.1705	0.3100	0.2638	0.2218
Turkey	0.0591	0.0498	0.0389	0.0267	0.0223	0.0207
Import labor						
S. Arabia	0.0358	0.0185	0.0140	0.0212	0.0259	0.0429
Bahrain	NA	NA	NA	NA	NA	NA
Oman	NA	0.0674	0.0992	0.0919	0.0871	0.0817
Libya	0.0364	0.0267	0.0204	0.0155	0.0439	0.0300
Kuwait	NA	NA	0.0230	0.0240	0.0262	0.0279
Country	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**
Export labor						
Sudan	0.0151	0.0256	0.0360	0.0162	0.0363*	NA
Egypt	0.1273	0.1263	0.0929	0.0726	0.1044	NA
N. Yemen	0.4204	0.4094	0.2703	0.2841	NA	NA
S. Yemen	NA	NA	NA	NA	NA	NA
Jordan	0.1992	0.1990	0.2574	0.2447	0.2255	0.2656
Turkey	0.0259	0.0378	0.0444	0.0411	0.0305	NA
Import labor						
S. Arabia	0.0453	0.0350	0.0266	0.0340	0.0436	NA
Bahrain	NA	NA	NA	0.0829†	NA	NA
Oman	0.0734	0.0576	0.0658	0.0950	NA	NA
Libya	0.0140	0.0177	0.0423	0.0534	NA	NA
Kuwait	0.0218	0.0251	0.0284	0.0535	0.0425	NA

Source: *IMF International Financial Statistics Yearbook*, December 1980, February 1983, December 1985.
*GDP in this calculation is a Ministry of Finance projection.
†As estimated in *The World Factbook* (Washington, D.C.: 1984).

Table 3. *Ratio of remittances to exports* in select labor-exporting and importing countries*

Country	1973	1974	1975	1976	1977	1978
Export labor						
Sudan	0.0145	0.0140	0.0034	0.0664	0.0560	0.1270
Egypt	0.1100	0.2045	0.3245	0.5533	0.5783	1.0499
N. Yemen	NA	10.1959	24.8247	88.3609	89.0048	132.6623
S. Yemen	0.3289	0.1878	0.3425	0.6733	1.0368	1.3195
Jordan	0.7562	0.5298	1.1211	1.9414	1.6882	1.5727
Turkey	0.9679	0.9633	1.0053	0.5757	0.6134	0.4763
Import labor						
S. Arabia	0.0502	0.0166	0.0198	0.0271	0.0365	0.0752
Bahrain	NA	NA	0.1892	0.1668	0.1628	0.2049
Oman	NA	0.0976	0.1442	0.1405	0.1411	0.1402
Libya	0.0683	0.0424	0.0380	0.0269	0.0749	0.0565
Kuwait	NA	NA	0.0301	0.0320	0.0379	0.0416
Country	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**
Export labor						
Sudan	0.2112	0.3851	0.4836	0.2079	0.3942	NA
Egypt	1.2333	0.9160	0.6898	0.6782	1.0313	1.1490
N. Yemen	69.2657	47.3287	16.3753	NA	NA	NA
S. Yemen	0.6666	0.4457	NA	NA	NA	NA
Jordan	1.2641	1.1589	1.2542	1.2425	1.5925	1.3919
Turkey	0.7382	0.7391	0.5363	0.3770	0.2689	0.2806
Import labor						
S. Arabia	0.0585	0.0397	0.0362	0.0683	0.1095	0.1400
Bahrain	0.1122	0.0786	0.0731	0.0874	0.0937	0.1101
Oman	0.1150	0.0990	0.1022	0.1660	0.1704	NA
Libya	0.0231	0.0284	0.0844	0.1145	0.1893	0.1390
Kuwait	0.0289	0.0352	0.0428	0.0711	0.0770	0.0790

Source: *IMF International Financial Statistics Yearbook*, December 1980, February 1983, December 1985.
*Note that exports include merchandise, goods and services, and are valued as free on board (f.o.b.) — the value at the customs frontier of the exporting country.

underrepresents the true magnitude of these flows. This underestimation is aptly illustrated in the case of Sudan where the appropriate entry in the balance-of-payments statistics accounts for less than 15% of earnings actually reported by the migrant workers themselves.[19] Thus, in this particular case, the conventional view, gleaned through formal accounting procedures, is simply not accurate.

When remittances, even those only formally recorded as such, enter the economy, the conventional view has focused on the impacts on the real side of the economy. As such it highlights some obvious consequences: remitted earnings initially appear as added income in the hands of consumers. Consumers may decide literally to "consume," or they may decide to "save" portions of received remittances and make "investments." The relative split of remittances between consumption and investment is an important determinant of further consequences. Thus, if the consumption portion is small relative to investment, the impacts on output are correspondingly greater. (There are short- and long-term effects, shaped by the existing supply elasticities, and the import content — depending on the prevailing adjustment mechanisms in the economy.) The conventional view has tended to stress that remitted earnings are really "squanderables."[20]

The recognized macroeconomic effects of remitted earnings are roughly characterized as follows: an increase in domestic consumption may have positive impacts on output through an increase in aggregate demand (assuming unutilized capacity and insufficient aggregate demand). Focusing on the real side, the conventional view stresses the contribution to output. In

Table 4. *Ratio of remittances to imports* in select labor-exporting and importing countries*

Country	1973	1974	1975	1976	1977	1978
Export labor						
Sudan	0.0144	0.0069	0.0015	0.0375	0.0342	0.0552
Egypt	0.1354	0.1318	0.1157	0.2212	0.2052	0.2712
N. Yemen	NA	0.7141	0.9198	1.6384	0.9493	0.7089
S. Yemen	0.1922	0.1022	0.1821	0.2894	0.3443	0.4429
Jordan	0.1681	0.1681	0.2341	0.3992	0.3049	0.3116
Turkey	0.5824	0.3827	0.2926	0.2136	0.1833	0.2327
Import labor						
S. Arabia	0.1988	0.1812	0.1315	0.1138	0.1028	0.1398
Bahrain	NA	NA	0.1900	0.1516	0.1481	0.1896
Oman	NA	0.2827	0.3105	0.3297	0.2538	0.2200
Libya	0.1515	0.1267	0.0734	0.0800	0.2269	0.1254
Kuwait	NA	NA	0.1155	0.0948	0.0764	0.0942

Country	1979	1980	1981	1982	1983	1984
Export labor						
Sudan	0.1030	0.1326	0.2056	0.0828	0.1815	NA
Egypt	0.5913	0.5743	0.2539	0.2331	0.3226	0.3350
N. Yemen	0.6279	0.5772	0.4421	0.5992	NA	NA
S. Yemen	0.3369	0.2273	NA	NA	NA	NA
Jordan	0.2593	0.2775	0.2905	0.2877	1.3040	0.3776
Turkey	0.3132	0.2670	0.2839	0.2418	0.1642	NA
Import labor						
S. Arabia	0.1387	0.1347	0.1163	0.1282	0.1336	0.1820
Bahrain	0.1125	0.0812	0.0770	0.0917	0.0898	0.0980
Oman	0.1894	0.1830	0.1975	0.2550	0.2776	0.2980
Libya	0.0699	0.0918	0.1639	0.2226	NA	NA
Kuwait	0.1023	0.1060	0.0987	0.0847	0.1211	0.1190

Source: *IMF International Financial Statistics Yearbook*, December 1980, February 1983, December 1985.
*Note that imports are valued with cost, insurance and freight (c.i.f.), not free on board (f.o.b.).

many developing countries unused capacity invariably prevails (for a variety of reasons). One common use of remittances is for purchase of real estate, generating construction activity. The construction sector is recognized as the initial point of disturbance in the economy. The construction sector's strong forward and backward linkages highlight the fact that bottlenecks in construction will manifest themselves as constraints on economic productivity. These linkages reinforce the salient role of construction in economic performances.[21] Often, as analysts observe, investment in real estate also pushes land prices upward, partly generated and partly accompanied by speculation activities.[22] Remitted earnings have generally been viewed as a primary determinant of inflation. There appears to be an underlying concern that inflation is aggravated by remittances in that it generates demand greater than the economy's capacity to meet this demand.[23]

In sum, the characteristic feature of the conventional view is that it focuses on organized economies and territorial boundaries. For accounting purposes, the viewpoint assumed as operative is that reflected in national income accounts, GDP accounting, and government receipts and expenditures. Characteristically, the sanctity of national borders governs macroeconomic views of the impact of migration and remittances. But national borders are highly permeable. In the Arab world, even where formal entry and exit points are controlled, flows of goods, services and manpower are to a large degree effectively not recorded or regulated.

The conventional view assumes that workers' remittances flow largely, if not exclusively, through formal channels, that is, established

banks or similar channels, and that their impacts can be delineated accordingly.[24] But what happens when individual workers do not choose to send their hard earned "bread" through formal mechanisms? A whole set of new economic and financial relations is set in motion. What institutional mechanisms operate to facilitate informal circulation? What implications does this have for the formal economy? Some mechanisms interact with the formal economy, and some escape established accounting procedures and shape the structure of the hidden economy.

The impacts of remittances on the economy can be delineated best by characterizing the disparities between the expectation of conventional economic theory and actual realities in the Arab world. The conventional view has focused on the real side, the goods market, to delineate the impacts of remittances. Some of these anomalies are particularly noticeable if one focuses on the monetary side of the economy, that aspect so singularly ignored by the conventional view of migration and remittances that has centered on the goods market. Since there is a correspondence between goods (and assets) and monetary flows, whether formal or informal, there is always a "real" counterpart to the monetary side. The interesting problem is to understand the particular correspondences.

4. SOME ANOMALIES

Without undue elaboration, we highlight the empirical context of the Middle East to draw attention to some peculiarities of the migration and remittance phenomenon in this region. These anomalies serve as counterfactual evidence to support our contention that the undocumented, largely ignored hidden economy is of major proportions and deserves closer attention.

First, the prevailing view of remittances is based on the formal record, and is probably not accurate. If indeed large numbers of workers remit substantial portions of their earnings home, as they are known to do in the context of Middle East migration, home country governments would have greater access to hard currency. We might even observe balance-of-payments improvements if the government obtains access to this source of foreign exchange. We might also see a reduction of inflation to the extent that the supply of goods and services increases. We observe that the opposite of the expected result is occurring: labor-exporting governments are experiencing decreased access to foreign exchange.[25]

Second, large-scale inflows of capital are usually expected to strengthen the local currency.[26] In the Middle East, this appears not to be the case. We observe the coincidence of foreign exchange inflows *and* a deterioration of the local currency. Remittances entering as capital inflows offset outflows. Yet, in many cases, we also observe a persisting deterioration of the balance-of-payments position in the absence of massive imports or large-scale smuggling. While chronic deficits signal problems of economic performances, capital inflows in the form of remittances are expected to improve a country's external balance.

Third, central banking authorities whose role it is to control overall money supply are expected to regulate interest rates and exchange rates, as well as the stock of money in circulation. Yet, in the Middle East, these authorities appear bypassed; monetary policy seems not to affect the intended target variables. Indeed, they are perhaps not even relevant in shaping the underlying monetary parameters. While government prints (or produces) local currency to meet demand for money, its monetary policy appears ineffectual.[27]

Fourth, the foregoing raise important questions regarding the concepts of territoriality and statehood. The magnitude of earnings abroad raises the question of whose productivity counts: that of citizens working abroad, or that of citizens working at home? And, does it make a difference precisely whose productivity one counts?[28]

5. A NEW VIEW: FOCUSING ON UNRECORDED CAPITAL INFLOWS

These anomalies require explanation. They also suggest that the impacts of migration and remittances must be explored in dual terms — effects on the real side of the economy and impacts on the monetary side. More importantly, the conventional view, while focusing on the goods market, has obscured the pervasive impacts on the money market. The conventional view is, to a large extent, trapped by its emphasis on formal accounting procedures for the real side of the economy. We present some tentative views of what might in fact be happening. To begin with, as we indicated above, there is mounting evidence that remittances flow largely through informal channels. They are literally hand-carried.[29] The new view begins by recognizing this reality and traces its implications on the real as well as the monetary side of the economy.

With respect to the real side of the economy, the conventional view ignores that the composi-

tion of demand-generated remittances may lead to a set of consequences which could set in motion a deterioration of the economy's payments position. For example, if demand is for tradeable goods, the impacts on the balance of payments will be discerned almost immediately through a rise in the import bill. If imports rise markedly, they could produce a net negative impact on the supply of foreign exchange, traced initially to the volume of remittances creating added income in the hands of consumers, and greater demand for tradeables. Thus, even from the perspective of the formal accounting of the real economy, earnings abroad that are indeed remitted could lead to a deterioration of a country's payments position.[30]

Alternatively, if demand is for nontradeables, two outcomes could take place: the supply of tradeable goods would increase (assuming prevailing unused supply capacity and insufficient aggregate demand) or a rise in price levels would be generated, or reinforced (assuming continued bottlenecks in supply, hence constraints on the production of domestic goods). The latter propels the oft-quoted inflationary impact of remittances. Corresponding to this would be added foreign exchange to finance other imports, service debt, or acquire foreign assets.[31]

In the short run, if there is unused (or excess) capacity, remittances are less likely to be inflationary. In the longer run, if remittances raise the savings rate, and the savings are directed to investments, there may well be a rise in output (with a lag). In this case, too, remittances are not likely to be inflationary (at least in the longer term, depending on the nontradeable composition of investments). In both cases, remittances will have expansionary effects in real terms. But if output does not, or cannot, adjust to meet demand, or if remittances tend toward nontraded "squanderables," there will be greater propensities for inflationary pressures.

With respect to consumption, the conventional view stresses the "squanderable" effects of remittances. An alternative supposition, however, still within the bounds of the conventional economy's formal accounting, is that even if the consumption ratio is higher, this may not necessarily entail expenditures on "squanderables," as it can contribute to meeting "basic needs," and hence improve the welfare of consumers (citizens and their families). While the conventional wisdom has it that remittances enhance propensities for squandering, recent empirical evidence is emerging pointing unequivocably to the contrary.[32]

What actually takes place, in terms of these alternative outcomes, depends on the specific parameters in question and, of course, on government policy, with respect to import composition or import controls. If demand is for tradeable goods *and* there are restrictions on imports, either tradeables will indeed not be imported, or alternatively, they will be smuggled into the country. If they do make their way into the economy, the concomitant effect is increased use of foreign exchange. If remitted earnings are *not* spent on squanderable *or* on imported goods, *or* on smuggled goods, then they should be circulating in the economy to be spent on consumption or investment or be available for the government as a source of foreign exchange (i.e., if they have been exchanged through established channels), to free up other sources.[33] Thus, the overall impacts would indeed be favorable for the home economy. But these contingencies are not negligible. Facile conclusions cannot be readily drawn even when remittances flow through formal channels. When remittances are hand-carried — as is common within the Arab world — their impacts are more difficult to delineate and the macroeconomic consequences on the real side of the economy and on the money supply are not easy to discern.

If remittances are hand-carried, then they bypass the entire network of governmental intervention, and they may even remain outside the accounting mechanisms of the formal economy. If we assume for the moment that this foreign exchange does indeed circulate in the economy, and is available to economic agents, its manifestation must be visible somewhere, even if these foreign exchange inflows are unrecorded. If remittances enter as hard currency their effects would be initially observed upon relative exchange rates (in fully adjusting markets when they exist).[34] We would expect to see a strengthening of the local currency relative to the hard currency.[35]

As it is observed that remittances flow through informal channels,[36] we must focus on the process of exchanging hard currency for local currency, and on the sources of demand for hard currency. For purposes of exposition we consider here situations where there is a flexible exchange rate in the black or free market coexisting with a government-imposed fixed exchange rate. The extent to which the actual exchange rate is influenced depends on the volume of foreign exchange available to the economy, and the willingness of those who provide this channeling service actually to bring foreign exchange. Thus the actual exchange rate reflects the relative supply and demand of the respective currencies. The rate of inflation, in turn, is influenced by the relationship between demand for goods and

services and their availability. Price levels thus can be influenced by added income in the hands of consumers (increasing demand) and by fluctuations in the exchange rate (affecting the cost of imports).

The conventional view stresses the increases in domestic price levels and a strengthening of the local currency — both due to foreign earnings in hard currency sent back home. However, in at least one case in the Arab world, namely Sudan, an important empirical peculiarity stands out, that is, a weakening of the exchange rate in conjunction with increases in domestic price levels. This, the second of the aforementioned anomalies, is also notable in Egypt, where in mid-1984 there was marked exchange rate deterioration.

As both the exchange rate and the rate of inflation appear influenced by the earnings and productivity of citizens engaged in employment outside national boundaries, the choice of perspective assumed becomes especially relevant: the domestic versus the national economy. Whose productivity counts? In the Middle East, the productivity of nationals abroad effectively increases the actual GNP and the GNP per capita of the individual economies. The conventional view still anchors reality in the national accounting statistics, constrained by territorial boundaries (GDP). Productivity beyond these boundaries is recognized by these accounts only if the evidence is recorded formally. The reality of the Middle East is such that the structure of labor markets, income generation, and the operation of financial agents involve permeable, diffuse borders. They are simply not consistent with established territorial boundaries.

6. THE ROLE OF FINANCIAL INTERMEDIARIES

The key to the inconsistency between large-scale reported remitted earnings and persistent economic and financial deterioration in the home economy lies in the demand for hard currency for reasons other than expanding the supply of goods via imports. Workers abroad are remitting their earnings in hard currency. Their families get dollars in local currency. At some point in the process, there is an exchange of currencies. Who transmits? Who exchanges? What are the impacts on the domestic currency in terms of the value of remittances relative to the foreign currency? Who controls this process? Where is the "power"? How do the political processes and the economic processes interact?

As we have noted earlier, informal channels account for the bulk of remittances to the families of workers abroad. Among the most important channels for this transmission are the networks of currency dealers (or money merchants) to whom the foreign workers give their hard currency with the assurance that their families in the home country will receive the equivalent in local currency.[37] These currency dealers exact a fee for their service, but more importantly, they derive a profit by delaying the delivery of the local currency when the local currency is depreciating with respect to foreign currency.[38]

The parties to this exchange are all satisfied in the process. The workers abroad are satisfied because they are assured that their families will obtain their remittances; security of the transmission and stability in the process are guaranteed by the money dealers. The families are satisfied because they obtain the local currencies required for their expenditures; the financial intermediaries are especially satisfied as they profit from the intertemporal exchange of currencies, gains that are over and above the "normal" profits for this currency exchange and transmission service. (This process depends on the extent to which workers abroad become aware of its discrepancies, and the money dealing sector is collusive or imperfectly competitive.)

The robustness of this process may well underlie the deterioration of the local currency. Some of this deterioration is due to a variety of structural and financial problems, including massive debts incurred by the government for payments of imports and debt servicing and further expansion of government expenditure, partly induced by inflation and an erosion of the tax base, to some degree a result of outmigration. Over and above the explainable deterioration is that which is induced by the activities of money dealers in this process. By anticipating (and enhancing expectations of) the devaluation of the local currency, they reinforce a process of deterioration of the local currency. Their profits are anchored to the differentials between the value of hard and local currency. By continuing to provide a critical service to the workers abroad and their families they reinforce their influence on the processes, and make observable financial gains in so doing. The government in turn expands the stock of local currency, and thus contributes to the deterioration of the exchange rate by raising the supply of a depreciating currency relative to the supply of hard currency.

But the government is not satisfied, and the

formal economy does not benefit from this process. The government is dissatisfied because it does not have access to much of the foreign exchange earned by its citizens working abroad. Indeed, it has no formal mechanism for "capturing" its take. The economy does not gain, because the foreign exchange that is earned abroad and subsequently remitted does not appear to enhance the supply of goods. This suggests that, in some cases, remittances in the form of hard currency may not even enter the economy at all.

The scenario sketched here does not resolve the puzzle of where the foreign exchange eventually surfaces, and what happens to it in the course of this process. Obscuring these central features of the hidden economy are the "normal" forms of capital flight, those shaped by political insecurity, concern with expanding government control, and a sense that today's hard-earned income should not be held hostage to a volatile political and economic situation. Thus, we observe in this hidden economy normal processes of capital flight associated with the formal economy that are common in developing countries generally and in the Arab world as well.

This "normal" type of capital flight is not a critical feature of the hidden economy. What is distinctive to the hidden economy, however, is flight associated with the exchange of currrencies remitted through informal channels — in massive amounts — in conjunction with a continued deterioration of the value of the local currency. This deterioration is not consistent with a scenario in which there are known large-scale capital inflows *and* no observable outflows (in terms of import payments, debt payments, smuggling, or other such activities). These peculiarities suggest the need for further explanations.

The location of the exchange process itself may be a relevant factor, as governments seek to devise means of expanding their control over foreign exchange markets. If the exchange (of hard for local currency) takes place outside the country (through promissory notes or other instruments), then the foreign exchange never actually enters and government control is more difficult. If it takes place inside, then the foreign exchange actually enters, and in principle at least, the government jurisdictions which regulate markets operating within their territories can be extended to these transactions as well. For policy purposes, this distinction is especially relevant in developing societies where informal financial mechansims are the rule rather than the exception. This distinction becomes important in revealing what actually happens to the foreign exchange earnings of nationals working abroad.

7. THE EXCHANGE RATE CLUES

Confounding this characterization further is the fact that the formal accounting mechanisms do provide the clues to tracking down the dimensions of the hidden economy and its processes, but they give signals that are incomplete and potentially misleading. For example, remitted earnings, recorded as "unrequited private transfers" in the balance-of-payments statistics are, in this case, a small fraction of total earnings abroad that are indeed remitted. So, too, the deterioration of the local currency, effectively devalued *vis-à-vis* the US dollar, is usually attributed to the weakness of the real economy and to a variety of structural and functional "distortions." Seldom is it acknowledged that the deterioration of the real (rather than government-controlled) exchange rate may be indeed manipulated by financial intermediaries — with or without the knowledge and collusion of the central banking authorities. No conspiratorial explanation is intended here, merely a suggestion that financial gains are enhanced through the operation of the mechanism described above. These gains are contingent on: (1) government being able and willing to bring greater volumes of local currency into circulation; and (2) continued confidence of the migrants in the integrity and reliability of the transmittal and exchange services provided by the financial intermediaries.

In some Arab labor-exporting countries, the hidden economy is so massive that the value of its transactions is several times the value of export earnings. It becomes the main form of economic activity and not a "side show."[39] Through its operations (often designated as "black market"), the "hidden economy" extends to a broader range of economic activities. Furthermore, migration, which fuels the engines of the hidden economy, continues to assure that income will be earned abroad, and that earnings will be remitted. The steady flow of remittances stabilizes the process. The quasi-institutionalized processes of financial intermediation are sustained by induced deterioration of exchange rates. As long as the value of the local currency worsens, and does so in a predictable fashion, then the financial intermediaries will correctly assess their anticipated profits. Expectations regarding future profits contribute to their exercise of induced pressure on exchange rates. This is not a futures market in the technical sense, as competitive mechanisms are suppressed by collusive and induced pressures on local currencies.[40]

Clearly none of this should be interpreted as arguing that induced pressures on exchange rates

constitute the sole or even primary reason for the observed deterioration of the value of the local currency. Deterioration of this magnitude is inconsistent with the large-scale *reported* capital inflows (as remitted earnings). In the absence of any other evidence regarding capital inflows on the real economy, the key to the apparent paradox must lie in the monetary side of the economy — and in the activities of the agents that shape the effective functioning of the financial markets.[41]

However, such a self-feeding speculative process cannot go on forever. There must be a continuing supply of local currency available to finance transactions of this kind. In cases where this occurs, there are massive remittances coexisting with shortages of goods, inflation in the price of importables, and further erosion of the local currency. These conjunctions suggest large and growing demand for foreign currency to be held as an asset — either as hard currency in the home country or to be converted to various hard currency-denominated assets held abroad (generally called capital flight). The inflow of remittances has allowed holders of local currency to gain access to foreign assets with a corresponding restriction in their availability to the economy for expansion of the supply of goods.

8. SOME ILLUSTRATIONS FROM EGYPT AND SUDAN

Recently, the Egyptian public has been regaled with stories of the presumed corruption of major money dealers, culminating in a court case between the major money exchangers and the Ministry of Economy. The money dealers were on trial for having withdrawn foreign exchange from circulation on a large scale, giving rise to a sharp deterioration of the real, or free, exchange rate and placing the Egyptian pound in a dramatically disadvantaged position relative to the US dollar.[42]

The government's financially precarious position led the Central Bank actually to borrow foreign exchange from money dealers. This move, in turn, reflected the government's acknowledgement of the importance of these agents in influencing the monetary side of the economy, and in shaping the relative exchange rates.[43] These events illustrate the influence of the money dealers and show that the volume of capital under their control has a substantial impact on the prevailing rate of exchange and on shaping expectations.

Although the Minister of Economy has resigned, acknowledging failure to control the activities of financial intermediaries, the story has not yet come to an end. At this writing the government's resolve to operate with four formal rates of exchange represents an organized attempt to bring the hidden economy to light and incorporate its monetary dimensions into the country's formal money supply.[44] The uncertainties in the case of Egypt pertain to the size of the holdings controlled by these financial intermediaries, and the process by which they gain control over foreign exchange. It is clear that workers' remittances constitute a major source of such capital.[45] But no one knows the exact volume of actual remittances. The country's balance of payments recorded $3.3 billion of remittances in 1983. Yet anyone familiar with Egyptian political culture and individual expectations regarding domestic stability would be quick to suggest that Egyptians working abroad may not have the utmost confidence in the government's economic policy. Although in recent years Egyptians working overseas have exhibited considerable confidence in the economy as a whole and in its ability to sustain large returns on initial investments, a strong mood of scepticism prevails. Thus, there continues to be motivation for sending money home, but not predominantly through formal channels, despite the government's exchange rate policy designed to encourage the use of established procedures and formal institutions.

If these suppositions hold, then we may infer that there are remitted earnings over and above those recorded in the balance of payments, and that they are channeled home through financial intermediaries (perhaps even literally hand-carried).[46] Thus, the volume of capital inflows from this source of foreign exchange is likely to be greater than is officially recorded. It remains to be shown where this money is and how it is circulated in the economy. Clearly, whatever remittances are in circulation are certainly not "captured" by the government. This realization, in conjunction with a progressively deteriorating exchange rate, has contributed to the headlong collision between formal authorities and informal financial intermediaries. The battle was led by the Minister of Economy: his resignation in April 1985 points to the government's inability to maintain its hard-line stance *vis-à-vis* the dominant financial intermediaries and to defend its effort to bring the hidden economy under the aegis of the regulatory authorities.

The Sudan case is a different variant, indicating more clearly some of the dimensions of the hidden economy. For Sudan we have rather

robust and consistent evidence, based on a large-scale sample survey of Sudanese workers in the Gulf countries, that remittances are channeled almost exclusively through informal networks.[47] From formal Sudanese balance-of-payments data we observe that remittances are rather marginal in size (certainly inconsistent with those reported by workers abroad and data about the presumed number of Sudanese nationals employed overseas). Concurrently, we also observe a deterioration in the exchange rate, flagged by international agencies as added evidence of overall economic deterioration. The only solution envisioned is "policy reform," which generally includes devaluation and freeing the exchange rate.[48]

The numbers characterizing the Sudanese economy simply do not add up to a consistent story. Large-scale capital inflows are consistently reported by workers abroad, amounting to close to $3 billion per year. (There is no reason to believe that a very large, decentralized sample of Sudanese nationals working abroad in four countries, would all misrepresent their individual economic behaviour in an internally consistent fashion by presenting false information.) Yet there is no evidence in any indicators of the formal economy that such massive capital flows are indeed taking place. Finally, the deterioration of the exchange rate is such that both the Government of Sudan as well as the international agencies are now agreeing that the condition of the economy has indeed reached "crisis" proportions. In this case, it is the hidden economy that is shaping the real as well as the monetary side of the Sudanese economy. It has become the main story, not the "side show." Encouraging workers to remit greater portions of their earnings is simply not a correct approach to the issues at hand. Even policy reform in the conventional sense of freeing the exchange rate may not, at this time, encourage real capital inflows from circulating in the economy. The monetary side is influencing the real side of the economy, and it in turn, is shaped by the hidden economy and the activities of informal financial intermediaries.

In the case of Sudan the evidence is more stark, the actors have more clear roles, and the protagonists are more sharply poised. The political process itself has been drawn into the debates. Five groups of actors have created the boundaries of the hidden economy; the struggle concerns its intersection with and control by the formal economy. First there are the workers abroad who generate the hard currency and whose confidence in the financial intermediaries is matched by lack of confidence in the government or the formal banking system. Second are the financial intermediaries, reputed to be a handful in number, hardly constituting a "competitive" financial market. Third are the holders of foreign assets, who may or may not be the financial intermediaries, and are not likely to be workers themselves since they are in fact sending earnings back home. Fourth are the formal banking agents, the central bank and other government authorities, who are expected to implement monetary policy and who are expected to attract private foreign capital of nationals abroad. Finally there are the commercial banks, whose survival depends in part on government and in part on the ability to attract business (both private and public).

Beyond the immediate actors is a political system in transition and an economy in trouble. The ultimate paradox is that nationals abroad, being very productive, do send earnings back home. These earnings surface in local currency. And that is the key to the hidden economy. Without further investigation we cannot determine where the hard currency actually goes — whether it ever actually crosses territorial boundaries or whether the exchange process entirely circumvents the step of actual captial inflow. Nor do we really know who holds the foreign assets.

Thus, in Sudan at least, we can characterize the process described above as a set of dichotomous outcomes: remitted earnings either enter the economy or they do not. If they enter (thus literally crossing national borders) they do so through formal mechanisms or through informal channels. If they enter through formal channels then the basis is set for their availability to the government (thus freeing up other sources of foreign exchange), and their impacts can be traced accordingly. If remittances enter through informal channels, they either stay in the economy, thereby eventually surfacing in some form, or they exit as capital flight.

In sum, if earnings abroad initially earned in hard currency do not enter into the economy in the form of hard currency, but are indeed remitted, they emerge in the form of demand for local currency. This demand must be met, and its effects are initially characterized as "added income in the hands of consumers." This income is in local currency, thus providing little reprieve for the country's foreign exchange shortages.

At each point in this chain, different actors, processes, and pressures interact. When economic conditions deteriorate, the entire process governing remittances assumes an importance far in excess of that accorded to it by the conventional view. Remittances become the main story, not the side show, and the hidden economy itself becomes the relevant reality. Then, too, the

policy implications differ depending on the chains or patterns that these realities assume.

9. CONCLUSION

To conclude, we stress the importance of recognizing the reality of a hidden economy in the Arab world. Evidence of its existence takes the form of a variety of puzzling features, most notable in the economies of Sudan and Egypt.

The hidden economy is created by the productivity of nationals employed abroad. Foreign earnings shape the framework of the hidden economy; it is created by the unrecorded hard currency transfers from workers abroad to dependent families in the home countries. It is controlled and manipulated by the foreign exchange dealers, the financial intermediaries. The holdings of hard currency by foreign exchange dealers, influencing the fluctuation of the exchange rate of the local currency relative to the hard currency, is a central monetary feature of the hidden economy.

Thus the linkage between the hidden and the formal economies and between nationals working abroad and their families back home is made by the informal financial intermediaries. None of this is illegal. In this sense we are not talking of a "black" economy, nor are we drawing attention to the "dual" economy so prevalent in developing countries. The view of the hidden economy we propose is one which serves to interface nationals working abroad with their families at home. It is an economy that transcends national borders, and one that escapes the policy net of the home government — as it seeks to capture its take of earnings abroad. Its sheer size makes it no longer possible to ignore; the hidden economy has become one of the most critical dimensions of Arab development. There are many puzzles which must yet be resolved. Among these is to determine who holds the foreign assets generated by nationals working abroad.

As the hidden economy is almost exclusively a monetary one, an explicit monetary perspective on remittances will greatly improve our assessments of the impacts at hand and might even explain the sheer ineffectiveness of government policy intervention. Indeed, we have seen many cases in which the monetary instruments employed simply do not impact on the intended target variables or financial agents. In the case of Sudan, at least, the size of the monetary side of the economy outside government control greatly exceeds that which is within govermental scope. The same may well be true for Egypt. Therein lies the importance of the alternative view stressing the hidden economy.

NOTES

1. Studies of labor migration across national boundaries in the Arab world focus almost exclusively on the phenomenon of mobility and tend to ignore the second-order effects, namely large-scale capital flows. For example, see Sherbiny (1984). The need for a multidisciplinary approach to the study of labor migration is, however, highlighted in Tabarrah (1985).

2. For a review of the literature bearing on remittances, see Russell (1984).

3. Defined thus, the hidden economy is not to be confused with a "laundered" economy, or an "underground" economy.

4. For a model exploring the macroeconomic effects of remittances on the Egyptian economy, see Choucri and Lahiri (1983).

5. See, for example, Serageldin *et al.* (1983).

6. Choucri (1983–84).

7. *Ibid.*

8. The following paragraphs are based on Choucri (1983–84).

9. See Choucri (1983b)

10. These figures are rough estimates, as no one knows for sure the precise numbers at any point in time.

11. Weiner (1980) and Choucri (1983a).

12. See Serageldin *et al.* (1984).

13. See Gilani (1981a, 1981b).

14. See LaPorte (1984).

15. Based on Choucri (1983b).

16. Choucri (1983a) Chapt. 5 and for specific illustrations of one particular case, see Sherbiny (1984).

17. Sherbiny (1984).

18. For a view pointing to increasing labor flows, see Sherbiny (1985); for an outlook indicating declining flows, see *The New York Times* (6 October 1985).

19. For an initial exploration of the Sudan case, see Choucri (1984).

20. See, for example, the review presented in Russell (1984). For a discussion of remittances for investment purposes, see Abdel-Fadil (1985).

21. Choucri, Eckaus, and Mohie-Eldine (1978).

22. See, for example, Chandavarkar (1980) and Swamy (1981).

23. This theme emerges in Russell (1984).

24. However, this holds largely in cases where decreased demand is heavily directed toward non-tradeables and supply in inelastic. Since demand is accompanied by foreign exchange that can bring in imports, in general, remittances should be noninflationary.

25. This query is addressed explicitly in Choucri (1984).

26. This is because capital flows generally increase the supply of goods relative to demand; however, not if the inflow is for investment with long gestation and/or domestic input is not financed by inflow.

27. Demand for money depends on exchange rates, interest rate fluctuations, and the level of activity. The role usually attributed to monetary policy is to adjust money supply relative to demand in order to determine the level of these variables.

28. This is the distinction between Domestic Product (GDP), a territorial concept, and National Product (GNP), a citizenship concept.

29. This observation is based on our analysis of sample survey data for Sudanese workers in the Gulf region obtained from five locales: Saudi Arabia, Yemen, Kuwait, the United Arab Emirates, and at the point of departure in Sudan. The study was undertaken in collaboration with a Government of Sudan research team. There is evidence from other countries as well that remittances in cash carried by friends account for the bulk of the flow. For example, Italian workers in Switzerland send less than half their remittances through legal channels. See Lebon (1984).

30. This issue is explored in Choucri (1984).

31. Accumulation of foreign assets constitutes reserve accumulation if by the Central Bank; or capital flight, if by private hands.

32. See Abu Gabal (1984) and Lucas and Stark (1984).

33. The foregoing depends on channels of expenditure. An obvious use is to hold the foreign exchange as an asset or to export it in exchange for other assets. Availability to government occurs through taxes, purchase of government-supplied goods (i.e., land), or through government borrowing (sale of bonds or other government securities). If remittances are exchanged through the Central Bank, they also can be recorded as official reserves which can be used.

34. Note that only if remittances flow though formal channels would this be the case.

35. This refers to increase in the flows, all other things being equal.

36. The survey study of 1,912 Sudanese working abroad conducted in conjunction with the Government of Sudan and the Massachusetts Institute of Technology in 1984–85 found that 14% of the overall total amount of remittances was channeled through Sudanese or foreign banks, the "official" channels. See Choucri (1985).

37. See *Euromoney* (1984).

38. While this supposition is largely an hypothesis, the circumstantial evidence is supportive. See *MEED* (1983). For an historical analogy, see De Roover (1976).

39. See Collins (1983), in contrast to Dornbusch (1984).

40. See *MEED* (1982).

41. See Nowak (1985).

42. See *MEED* (1985a).

43. See *MEED* (1985b).

44. See *MEED* (1984, 1985c).

45. See *MEED* (1985d).

46. See Russell (1984).

47. This statement is strongly supported by the results of survey analysis for a sample of 1,912 Sudanese workers in five locales of employment in the Gulf. See Note 29.

48. See Nashashibi (1983).

REFERENCES

Abdel-Fadil, Mohamed A., "The economic impact of international migration with special reference to workers' remittances in countries of the Middle East," International Population Conference (Florence: 5–12 June 1985).

Abu Gabal, Ahmed, *Migration of Sudanese: Causes*

and Disequilibrium Exchange Rates (Cambridge, MA: Massachusetts Institute of Technology, 1984).

Chandavarkar, A., "Use of migrants' remittances in labor-exporting countries," *Finance and Development* (June 1980), pp. 36–39.

Choucri, Nazli, *Asians in the Arab World: Labor Migration and Public Policy* (Cambridge, MA: Technology Adaptation Program, Massachusetts Institute of Technology, 1983a).

Choucri, Nazli, *Migration in the Middle East: Transformations, Politics, and Processes*, Vols. I and II (Cambridge, MA: Technology Adaptation Program, Massachusetts Institute of Technology, 1983b).

Choucri, Nazli, "Migration in the Middle East: Transformation and change," *Middle East Review* (Winter 1983–84), pp. 16–27.

Choucri, Nazli, *Assessments of Macroeconomic Impacts of Labor Migration and Remittances in Sudan* (Cambridge, MA: Technology and Development Program, Massachusetts Institute of Technology, 1984).

Choucri, Nazli, *A Study of Sudanese Nationals Working Abroad*, Final Report, Vols. I and II (Cambridge, MA: Massachusetts Institute of Technology, 1985).

Choucri, Nazli, Richard Eckaus, and Amr Mohie-Eldine, *Migration and Employment in the Construction Sector: Critical Factors in Egyptian Development* (Cambridge, MA: Massachusetts Institute of Technology, 1978).

Choucri, Nazli, and Supriya Lahiri, *Macroeconomic Impacts of Remittances in Egypt: An Exploratory Analysis* (Cambridge, MA: Technology Adaptation Program, Massachusetts Institute of Technology, 1983).

Collins, Susan M., "Expected devaluation with capital restrictions: The rôle of black markets" (Cambridge, MA: Harvard University, August 1983).

De Roover, Raymond, "What is dry exchange?" in J. Kirchner (Ed.), *Business, Banking, and Economic Thought in Late Medieval and Early Modern Europe* (Chicago: The University of Chicago Press, 1976), pp. 183–199.

Dornbusch, Rudiger, *External Debt, Budget Deficits and Disequilibrium Exchange Rates* (Cambridge, MA: Massachusetts Institute of Technology, 1984).

Euromoney (May 1984) p. 186.

Gilani, Ijaz, *Pakistani Emigration to the Middle East: A Cost Benefit Analysis* (Pakistan Institute of Development Economics, April 1981a).

Gilani, Ijaz, *Labor Migration from Pakistan to the Middle East* (Pakistan Institute of Development Economics, June/July 1981b).

LaPorte, Robert, Jr., "The ability of South and East Asia to meet the labor demands of the Middle East and North Africa," *The Middle East Journal* (Autumn 1984), pp. 699–711.

Lebon, Andre, "Les envois de fonds des migrants et leur utilisation," *International Migration*, No. 4 (1984) pp. 281–331.

Lucas, Robert E.B., and Oded Stark, *Motivations to Remit* (Harvard University: Migration and Development Program, 1984).

Middle East Economic Digest (17 December 1982), p. 71.

Middle East Economic Digest (13 May 1983), p. 64.

Middle East Economic Digest (2 November 1984), p. 15.

Middle East Economic Digest (11 January 1985a), p. 6.

Middle East Economic Digest (1 February 1985b), p. 6.

Middle East Economic Digest (29 March 1985c), p. 12.

Middle East Economic Digest (12 April 1985d), p. 12.

Nashashibi, Karim, "Devaluation in developing countries: The difficult choices," *Finance and Development* (March 1983), pp. 14–17.

The New York Times (6 October 1985), p. 1.

Nowak, Michael, "Black markets and foreign exchange," *Finance and Development* (March 1985), pp. 20–23.

Russell, Sharon, "Remittances from international migration: A review in perspective," Paper prepared for Research Seminar on Migration and Development (24 April 1984). Revised version appears in this issue of *World Development*.

Serageldin *et al.*, *Manpower and International Labor Migration in the Middle East and North Africa* (Oxford: Oxford University Press, 1983).

Serageldin *et al.*, "Some issues related to labor migration in the Middle East and North Africa," *The Middle East* (Autumn 1984), pp. 615–642.

Sherbiny, Naiem A., "Expatriate labor in Arab oil-producing countries," *Finance and Development* (December 1984), pp. 34–37.

Sherbiny, Naiem A., "Labor and capital flows in the Arab world: A critical view," *The Industrial Bank of Kuwait* (February 1985).

Swamy, G., "International migrant workers' remittances: Issues and prospects," *World Bank Staff Working Paper*, No. 481 (Washington, D.C.: The World Bank, 1981).

Tabarrah, Riad, "Demo-economic consequences of international migration," International Population Conference (Florence: 5–12 June 1985).

Weiner, Myron, "Indians in the Gulf: The beginning or the end of a diaspora?" (Cambridge, MA: Massachusetts Institute of Technology, 1980).