1. Introduction

An economic leakages could be defined as an inefficiency resulting from misallocation (mismanagement) of resources. This definition however is broad enough to border on uselessness. In this study, we are concerned with foreign exchange (financial) leakages whose definition is also surrounded by conceptual difficulties. One definition, which we think would be both operational and satisfactory, is that "a foreign exchange leakage is the failure to make maximum use of potentially available foreign exchange to the country concerned".[(1)] Other definitions include misallocation of foreign exchange which is bound to affect adversely development effort, underpricing of one's own resources by foreign companies, transfer pricing of Multi-National Corporation (MNC) involved in industry, and financial discrepencies in the Balance of Payments accounts between economic and financial flows. Conceptual difficulties concerning definitions aside, quantification of financial leakages is also a formidable task.[(2)]

Concerning financial leakages in African economies and considering the conceptual and statistical difficulties alluded to earlier, quantification, perhaps should not be the sole objective of a study on leakages. As equally important aspect would be the description of the mechanisms through which leakages take place. A close knowledge of such mechanisms/tricks would go along way understanding the motives, guessing the magnitude and perhaps reversing the trend of leakages. In this study we will try both to quantify and understand how and why foreign exchange leakages take place.

Two categories, under which foreign exchange leakages take place, can be identified. In the first category, foreign exchange leakage is a result of historical structural factors that resulted in the dependence on metropoles for such services as insurance, shipping .. etc. The second category of leakages takes place as a result of government policies be they on the side of liberalization of trade and payments or on the control/restriction side (statutory allocation of foreign exchange).

In whatever form leakages take place, it seems safe to say that, a "Black-free" market for foreign exchange usually develops. The flourishing or demise of such a market depends mainly on policies pursued. In this respect, leakages that are due to historical structural factors and whose correction could only be through long-term measures, would be assumed to have only a marginal effect on the working of the free foreign exchange market. Sources for this market are more likely to be associated with policy induced leakages. This is so because much historical leakages took place through foreign agents/companies who either own shipping lines, insurance companies, ..etc., or control export-import trade. In both cases leakages taking such form could be sub-defined as leakages of "first degree", because they represent "disguised" capital flight, in contrast to leakages of "second degree" where the foreign exchange leaked comes back to the country unofficially, thus, inefficiently used. The Black foreign exchange market thus observed can be assumed to operate mainly through sources originating from policy induced leakages. Its demand side is also strongly offered by policies undertaken.

A suitable framework for the analysis of leakages in Sudan is, thus, to look at the policies pursued and trace their effect on both the supply of and demand for foreign exchange in the Black market. To begin with, however, let us set the main components of these sides. Supply of foreign exchange is expected to come from at least five sources :-

1. Underinvoicing of exports,
2. overinvoicing of imports,
3. smuggling,
4. transfers of nationals working abroad, and
5. inflow of foreign exchange by refugees, companies, tourists and organizations.

Currency overvaluation is thought generally to result in the first two types (Hufbauer and O'Neill (1972), Winston (1969) and Bhagwati, Krueger and Wibulsuradi (1974)).[3] There is a strong incentive to overinvoice imports, if the importer (under exchange

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ELFATIH SHAAELDIN
SIDDIG UMBADDA
DEVELOPMENT STUDIES AND
RESEARCH CENTRE (DSRC)
UNIVERSITY OF KHARTOUM

KHARTOUM

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control regime) can secure foreign exchange at low exchange rate and sell it later at a high black market rate. Evidence for overvalued Sudanese currency was first provided by Kadri (1974) and indicated in the free market rate.(4) Similarly underinvoicing takes place, if the exporter can escape surrendering some of his exports earnings to the central bank. Empirical evidence on both types as vehicles of capital flight was provided by Bhagwati, Kruger and Wibulsuradi (1974) as substantial, but add that, "the phenomenon of overinvoicing of imports as a vehicle of capital flight seems to be much more restricted than the "phenomenon of underinvoicing of exports"(5) (p. 154).

With regards to smuggling, Cooper (1974) suggests that high tariffs and corruptible enforcement makes smuggling attractive.(6) Generally, speaking, however, the higher the price differential between domestic and border prices the greater is the incentive to smuggle.

The last two sources of supply of foreign exchange in the free market have a rather recent origin in Sudan and are mainly set in motion after the 1979 liberalization of the foreign exchange transactions. This should not however obscure the fact that savings of Sudanese working abroad were an important source of finance to the"nil-value" imports system practiced during the seventies.

Demand for foreign exchange in the free market could be identified as originating from three main quarters :-

1. Sudanese travellers spending their holidays away from home (60,000 to U.K. in 1982) or piligrims, Sudanese travelling abroad for health purposes and expenditure on private education abroad.

2. Importers of both commercial and industrial sectors whose interests are seriously affected by shortage of foreign exchange at the official price.

3. Companies who want to repatriate supernormal profits - not allowed to be repatriated under investment laws, or who want to liquidate their assets prematurely and individuals (nationals) who

want to hold assets outside their home country. This last catègory with regard to Sudan experience could be considered to be the effective and damaging form of demand because it represents a leakage of "first degree" as we mentioned earlier.

In the subsequent sections we argue that in the pre-1979 period there existed a strong incentive for foreign exchange leakage to take place. Both underinvoicing and overinvoicing were known to have occured during this time. The magnitude of under/overinvoicing however has been reduced due to the development of new foreign exchange systems and the greater involvement of government in foreign trade. With regard to smuggling it has been significantly increasing recently. Accordingly to one study (Ali, 1976) in 1975, 25% of the production of oil seeds were reported to have been neither exported (official), nor consumed locally in Sudan.[(7)] Government reports have been showing substantial scale of smuggling of agricultural crops and livestock to noughbouring countries.[(8)] Apart from over/underinvoicing and smuggling the major avenue for foreign exchange leakage has been capital flight through the free market. Moreover, the increasing indebtedness of the country resulted in resorting to short-term commercial loans with unfavorable terms. In addition to these financial leakages the country has been subjected to labor force drain which is severely affecting productivity. The infant import-substituing industrial units are victim of high labor-turnover in addition to several other constraints that are jeopardizing the whole industrialization experience.

2. Merchandize Trade

2.1 Overinvoicing and underinvoicing : A Historical perspective

Overinvoicing and underinvoicing have historically been important mechanisms of illegal transfer of foreign exchange especially during the late 1950's and 1960's. During the Anglo-Egyptian rule foreign trade was dominated by foreign comapnies such as Gellatly Henkey Ltd., Sudan Mercantile Group, Boxal and Mitchell Cotts. These companies controlled the largest proportion of the export-import and wholesale trade. The distribution of petroleum product was first monopolized by Shell and later shared by Mobil Oil, Total and Agip. At the lower levels of trade, foreigners of levantine, Egyptian or other Arabian origins played the intermediate role between small Sudanese traders (Jallaba) and the wholesale big firms.

After decolonization a slow process of indigenousization in the trade sector began. Indigenous business firms started competing with foreign firms at the different levels of trade. Moreover, during the immediate postindependence era there was strong nationalist and anti-foreign mood prevailing in the country. Anti-foreign sentiments were also reinforced during the turmoil brought about by the popular uprising of October Revolution (1964). Trade unions and the national nascent capital expressed demand for nationalization and Sudanization of the trade, insurance and banking sectors. In 1970 the then revolutionary government nationalized the banking system and most of the foreign trade sectors. Such political environment led to an ever feeling of insecurity among foreign business. A large number of foreigners left to Canada, Australia, South Africa and U.S.A. (Hamad, 1974, p. 123).[9] Thus, the urge, though not concrete evidence, for capital flight was prevalent.

Control of foreign exchange was reinforced after the establishment of the Bank of Sudan 1960. All foreign exchange proceeds from exports were to go through the Bank of Sudan. Yet, a main avenue for capital flight was thought to be overinvoicing, underinvoicing and price transfers.

Evidence for price transfer were provided by a study undertaken in 1971 about three out of four foreign oil companies, namely shell, Mobil and Total.[10] prices of crude oil recorded by the oil Companies were revised and compared with prevailing international prices allowing for freight and insurance costs adjustments. The practice then was that the price of petroleum products were known to authorities through free market quotations in the U.S.A. and the Gulf. These quotations used to give the price "free on Board" (FOB) at the loading port. To this figure must be added the freight and insurance to Port Sudan. The resultant price would be a "C.I.F.). In Port Sudan, customs duties, habour dues, taxes, other charges and marketing expenses would be added. Finally, the companies were usually allowed profits of up to 10% on C.I.F. above their marketing expenses and in land freight. It was found out that the prices reported by the companies were higher than the market prices and differed from each other. Shell Company's total value of purchases during the period 1965-1971 was $ 38.1 million. The equivalent international prices for these purchases totalled only $ 36.2 million. The company realized a difference in prices of $ 1.9 million in addition to profits allowed. Mobil Company imported 8.9 million barrels valued by the company at $ 13.878 million. The difference from adjusted international prices was $ 1.095 million. Total also realized a difference in price of $ 0.4 million. For the three companies the difference was $ 3.4 million. (See table (1)).

Table (1) : Price transfers by Oil Companies

Company	Value of imports according to comp. US $ million	Value of imports according to International prices US $ million	Diff. in US $	Diff. in per cent
Shell	38.1	36.2	1.9	5%
Mobil	13.9	12.8	1.1	8%
Total	9.3	8.9	0.4	4%
	61.3	58.0	3.4	6%

Source : Sudan Government, Dept. of Petroleum, 1981.

It was also found that those companies reported higher freight costs than prevailing. For Shell alone the difference found between the prevailing prices and prices reported by the Company was $ 98,907. Similarly, the exports of Nafta, Mazot were valued at prices less than the prevailing prices making difference of $ 1.198 million for the three companies.

Table (2) : Differences in Freight Costs
(1965 - 71)

Company	Costs according to Comp. ($ 000)	Costs according to international prices ($ 000)	Diff.* ($ 000)	Diff. (per cent)
Shell	936	659	277	29.5%
Mobil	135	132	3	2%
Total	35	35	0	0%
	1,106	826	280	25.3

Source : Sudan Government, Dept. of Petroleum, 1981.

That was about the only comparative study made. The imports of oil and oil products had been only a small proportion of foreign trade up to 1973. Other exports, e.g., cotton, groundnuts, sesame, gum arabic, .. etc. used to be marketed by the private sector. Imports consisted of food items such as wheat, lentils, rice, sugar coffee and tea; agricultural machineries and inputs such aas tractors, fertilizers, insecticides and sacks, fuel and textiles, .. etc. All of these were imported by the private sector. The banking sector, on the other hand, was dominated by foreigners. The control of export-import and banking sectors by foreigners together with the hostile attitude towards these foreigners in the country created objective and necessary conditions for capital flight through overinvoicing and underinvoicing, later, however, over and under invoicing became of less significance as a mechanism of foreign exchange leakage. This is so because : (1) direct foreign domination of foreign trade was reduced after 1970, (ii) government involvement in trade has substantially increased and (iii) there are recent changes in the mode of financing imports and changes in the foreign exchange systems.

In the subsequent paragraphs these points will be discussed in detail. Prior to that it should be noted that we are not implying here that leakages through overinvoicing or underinvoicing or similar forms disappeared entirely. Our main contention is that other forms of leakages have gained more importance. We will argue that due to a considerable government involvement in foreign trade, foreign exchange leakage can take place as a result of mere corruption by government officials, inefficient marketing or higher prices in import financed by suppliers credit or conditional loans. Secondly, for the private capital, a leakage take place through direct capital flight using new channels that have been introduced after the establishment of free foreign exchange market.

2.2 Government Involvement in Foreign Trade

In Sudan, there has been considerable government involvement in direct productive activities, distribution and finance. This could be attributed to certain historical developments since the colonial days. Despite a long history of long distance trades, marketable surplus and foreign trade were limited at the eve of the Anglo-Egyptian colonization (1898). During the early days of colonial administration, government revenue was so limited that budgetary deficit was to be financed from Egypt up to 1916. The colonial administration encouraged foreign investments and commercialization of agricultural production. However, attempts to establish plantations and mines enclaves by foreign companies failed. The government was, hence, forced to get involved in direct investment in order to generate revenue. The Gezira Scheme, which remained the single most important economic activity in Sudan for some decades, was established in 1925 partly for the purpose of generating revenue for the government though mainly to serve the interest of the British Cotton Growers Association.

After independence (1956), private indigenous capital was not capable of carrying on accerelated rate of capital accumulation. The government, on the other hand, enjoyed substantial foreign exchange reserves that was accumulated during years of cotton boom in the early 1950's (Korean War). Thus, the government invested heavily on direct productive activities as well as infrastructure. Large scale agricultural projects such as the Managil Extension and Khashm El Girba were established during the early 1960's. Nine factories were constructed and distributed throughout the country. But up to 1969, the government direct involvement in foreign trade was limited despite attempts to control the marketing of few imported consumer goods (tea and coffee). After 1969, a new government- ideological motivated and with strong socialist and nationalist- orientations - nationalized several foreign and local enterprises - mainly concentrated on banking and foreign trade. That signaled a beginning of a considerable government involvement in exports and imports which continued up to the present despite a slow denationalization trend.

At the present the major exports are agricultural with little processing. The proceeds from the exports of cotton, groundnuts, sesame, gum, dura (sorghum), and livestock constitute about 85% of total exports earnings. Table (3) gives the commodity composition of exports for the last 5 years.

Table (3) : Commodity Composition of Exports (%)

	1977	1978	1979	1980	1981
Cotton	57	52	65	43	19
Gum	6	7	8	7	10
Sesame	8	9	3	9	10
Groundnuts	13	10	4	2	19
Dura	2	1	6	16	12
Livestock	12	17	11	17	20
	100	100	100	100	100

Source : Bank of Sudan Reports.

The government is directly or indirectly involved in the marketing of cotton, groundnuts, sesame, and gum. Cotton has historically been the major exportable crop. Despite a recent decline in output and yield, cotton is expected to regain its relative importance as a foreign exchange-earning crop. The marketing of cotton at present is undertaken by the Cotton Public Corporation (CPC) which is a government-owned entity. All schemes deliver their ginned cotton to CPC. The latter announces a minimum price for all grades with sales effected on the basis of competitive bids.

A foreign exchange leakage in the cotton exports can take place only as a result of inefficient marketing strategy and/or mere corruption. However, it is not possible to compare prices of Sudanese cotton with other international prices. It is difficult to assess the loss of foreign exchange due to inefficient marketing of cotton. This is so because of differences in grades and quality. If anything the lack of attempts to protect cotton from deterioration due to storage or transportation may cause great losses in foreign exchange. Table (4) below gives comparison between prices of Sudanese cotton and Egyptian cotton - both of which are of extra long staple variety.

Table (4) : Comparison between Prices of Sudanese and Egyptian Cotton

	Sudanese (1)	Egyptian (2)	1/2 as %
1976/77	105.55	143.06	73.8
1977/78	95.96	122.29	78.5
1978/79	108.17	138.72	78.0
1979/80	115.95	136.37	85.0
1980/81	112.0	137.66	81.3

Source : Agricultural Sector Vol. 1st Economics Conference, Dec., 1982, p. 52.

The government is also involved in the external marketing of gum and oil seeds (groundnuts and sesame). It holds 58% and 30% of the equities of the Oil Seeds Company and the Gum Arabic Company respectively. The Gum Arabic Company monopolizes the marketing of gum since 1969. Since the Sudan is a price leader, comparisons of prices with other countries is meaningless. The Sudan Oil Seeds Company was established in 1974 and it used to have a complete monopoly of the export of oil seeds until 1979. At present, the company has a monopsonic position on the purchase of oil seeds in one domestic market and, hence, a major exporter of oil seeds.

Table (5) below provides data on comparison between trade statistics of marketing Sudanese groundnuts and the prevailing international prices at the time of exports in Europe. Difference in prices reflect differences in quality, but also a result of inefficient marketing.

Table (5) : Groundnuts Prices

	1971	1972	1973	1974	1975	1976
Trade Statistics f.o.b. (Sudan)*						
Groundnuts (shelled)	220	231	268	543	481	393
Groundnuts oil	-	-	712	567	540	588
Groundnut Cake and Meal	79	82	228	187	83	67
C.I.F. Europe						
Groundnuts (shelled)	249	261	393	607	452	424
Groundnuts oil	441	426	546	1077	857	741
Groundnut Cake and Meal	98	122	266	174	140	n.a.

Source : Dept. of Statistics and IBRD

* Converted at official exchange rate

The preceding analysis clearly indicates that the government is highly involved in export activities. This is also true for import activities. Table (6) below depicts the composition of imports :

Table (6) : Composition of Imports

Item	Composition (%) 1971/72	1980/81
Food	24	22
Other consumer goods	9	5
Petroleum	4	21
Intermediate Goods	42	30
Capital goods	21	22
Total Imports	100	100

Source : World Bank, Sudan : Investing for Economic Stabilization and Structural Change, Feb. 1982.

Historically, most of imports were undertaken by the private sector. Fuel, as mentioned earlier, used to be imported by Foreign oil companies. Machineries, chemicals, textiles and several food items were mainly imported by the private. Since the early 1970's the dominance of the private sector on imports has changed. Table (7) below shows government's purchases as per cent of total imports for 6 years. Despite fluctuations it remained in the range of 40 - 50%.

Table (7a) : Government Direct Imports

	1976	1977	1978	1979	1980	1981
Imports	239.4	245.9	290.3	479	709.8	1000.6
Govt. Direct purchases	120	109	84.4	252.8	355.6	408.7
as % of total	50%	44.3%	29%	52.8%	50%	40%

Source : Bank of Sudan Report, 1981.

The importation of petroleum products, sugar and a large portion agricultural inputs is undertaken by the government. In fact as shown below - the imports of petroleum products constituted 21.5% and 21.2% from total imports in 1980 and 1981 respectively - it also constituted 68% and 79% of total exports in 1980 and 1981 respectively. Sugar imports constituted 14.9% of total imports and 47% and 33% of total exports in 1980/and 1981 respectively.

Table (7b) : Imports of Petroleum Products and Sugar

	as % of total imports		as % of total exports	
	1980	1981	1980	1981
Petroleum products	21.5	21.2	68	79
Sugar	14.9	8.9	47	32

Source : Bank of Sudan Annual Report, 1981.

The importance of petroleum products is mainly the responsibility of the newly established public "General Petroleum Corporation". Sugar is imported by the Sugar Marketing Corporation. Over 70% of fertilizers imports are brought by the Gezira Scheme. The

Gezira Scheme is also a major importer of insecticides. Virtually all insecticides are government imports. Moreover, two government corporations : the Engineering Equipment Company and the May Engineering Company are major importers of machinery and equipment. During the years 1969-76 imports by the Agricultural Bank - a government owned credit institution - accounted for 50% of total tractor imports into Sudan.

Leakages in these public transactions on imports can take place as a result of unfavorable terms that may result from inefficient marketing, corruption, lack of competition on bids and/or conditions imposed by financers. In what follows we will illustrate leakages on the importation of two essential imported commodities - petroleum and sugar. These two accounted for around one-third of total imports in 1980 and 1981.

The bill for petroleum products has increased substantially after the sharp increase in the prices of oil. The value of imports of petroleum products as a per cent of total export proceeds has been around 70%. As a result of BOP problems the companies found difficulties in securing the foreign exchange counterpart for their imports. Hence, the private companies left the importation of oil to the government-owned - General Petroleum Corporation (GPC).

At the early years of the General Petroleum Corporation the government obtained oil facilities from Iraq, Iran and Saudi Arabia. Of late the GPC started buying in the market - more often resorting to suppliers credit. A grace period of up to 360 days is usually agreed upon in addition to a low rate of interests ranging between 2 - 5%. In few times barter or bilateral agreements took place.

The usual procedure for signing contracts with suppliers is to agree initially on a certain price but to allow for price adjustments depending on changes in the market. The final price will be that which is prevailing during the time of lading. The GPC receives information on prices of FOB and CIF at Italy - through a consulting firm (Mcgraw Platts). The clause in the contract allowing for de-escalating or re-escalating price is important. At the time of writing the contract the GPC and the sellers are aware of a seasonal pattern of changes in prices, e.g., prices do usually rise in winter for certain products. There are also irregular but sometimes predictable changes in prices due to changes in supply and demand - as when recovery out of world recession is expected. The dere-escalating pricing procedure allows for such adjustments and minimizes the risk for GPC.

A possible source of leakage occurs when it is expected with a high level of probability that there will be a price decrease and yet no price adjustment is allowed for in the contract. Such a procedure happened, for instance, when a deal was struck with Shaikh Salih Abdalla Hamid who realized profits since at the time of lading the prices were much lower than the agreed prices.

Table (8) shows the difference in prices between the international OPEC price and the price agreed to between the GPC and private suppliers. The data in the table covers the last period in which the spot market price has been lower than the OPEC price. Differences in prices range between 2 - 42%. Weighted average incorporating quality is 19.22%. These differences can be attributed to the creditworthness of the GPC. The latter has been defaulting in payments lately. Since the risk for the sellers of not receiving the full value of their sales is high they tend to charge higher prices than the prevailing ones. Moreover, a term in the contract allows for automatic increase in the interest rate if payments are delayed. In fact, since the GPC could not provide foreign exchange easily for its purchases it resorts to side contracts rather than competition bidding. This creates opportunities for corruption. Both corruption and low credit rating can best explain the differences in prices referred to earlier.

Similar developments have been taking place in the importation of sugar. Despite attempts to be self-sufficient in sugar, the country still imports sugar. In 1979, for instance, 294 5000 metric tons (m.t.) had to be imported at a cost of US $ 122.7 million. In

Table (8) : Comparison of Contracted and International Prices of Petroleum Products

Date	Product	Contracted price US $/ton(CIF)	International price (000 ton)	Quantity (000 ton)	Per cent of Difference over paid
26/3/82	Gas Oil	340	294.59	21.983	19.2
9/4/82	Sugar	350	318.8	2.958	8.9
19/4/82	Benzene	350	306.3	14.279	12.5
18/8/82	Gas Oil	355	296.7	2.883	16.4
22/8/82	Gas Oil	355	296.7	2.886	16.4
29/8/82	Benzene	381.9	338.2	2.269	11.4
11/9/82	Gas Oil	326.85	320.8	18.829	1.9
22/11/82	Gas Oil	410	291.5	23.734	28.9
22/11/82	Benzene	410	289.5	3.716	29.4
2/12/82	Gas Oil	395	292.7	20.429	25.9
6/12/82	Sugar	395	297.7	2.078	24.6
6/12/82	Benzene	395	281.7	3.118	28.7
4/12/82	Gas Oil	395	292.7	5.223	25.9
20/12/82	Benzene	374	280.2	2.271	25

Source : Betroleum Public Corporation

NOTE : Terms of these contracts include grace periods ranging between 90 - 360 days and interest rates ranging between 2 - 5%.

1980 the sugar bill amounted to US $ 183.6 million. Sugar imports as a per cent of export proceeds reached 47% in 1980 and around 33% in 1981. Again the inability of the Sugar Marketing Corporation, or rather the Bank of Sudan, to guarantee foreign exchange availability led to more and more dependence on suppliers credit and side offers rather than competitive bidding. As a result, contracted prices are higher than prevailing international prices. Table (9) provides evidences for these differences in prices. The weighted average (per cent) for the difference in value divided by total value of imported sugar for the sample used is 4.55.

Table (9) : Comparison of Contracted Prices and International Prices of Sugar

Date	Quantity in m.t.	Contracted prices $/m.t.	In. Prices $/m.t.	Per cent of diff./cont. price
25/1/1981	1,000	1,000	827	17.3
13/2/1981	10,000	950	809	14.8
28/6/1981	11,000	607	583	3.9
22/10/1981	40,000	507	507	0.0
20/6/1982	10,000	370	348	5.9
12/9/1982	12,000	375	328	2.0

Source : The Sugar Marketing Corporation. (International Prices in British Sterling have been converted to US $ using rates gives by the Economist).

NOTE : All above prices are on CIF free out of Port Sudan plus 2% interest over London International Bank offer Rate (LIBOR) to be paid after 360 days from date of Bill of lading (B/L).

Aside from oil and sugar, government imports include several other items such as wheat and agricultural inputs. A governmental purchasing office at London has been responsible for affecting many of the government purchases. This office has been the focus of ongoing struggle and attempts to control by several local and international groups. The government regulates its purchases through a government purchasing and contracting Act of 1978. Item "9" of that Act clearly indicates that all government units should use competitive bidding. However, exceptions are made though should be approved by the Ministry of Finance. It is this exceptional rule that makes it possible to bypass competitive bidding in the Oil and sugar purchases.

Competitive bidding is likely to minimize the chances for leakages and to guarantee better deals for government purchases than other procedures. Yet even in these biddings, leakage can take place. The effectiveness of bidding is reduced when information on competing companies is leaked to other companies. It is occasionally the case - as we have been told - that some companies plant moles in the concerned government department. These moles disclose information on offers and keep companies informed of competitors' prices.

Also, the effectiveness of competitive bidding is ensured if sufficient publicity for the tenders is made. In cases of low publicity only few companies enter into bidding. In certain cases the competing companies themselves hunt for information. However, in some other cases few companies compete for the contract. This is best illustrated by the case of Gezira scheme's purchases. The latter imports insecticides, herbicides and fertilizers. There are more than 20 types of chemicals imported by Gezira. However, it has been noticed that only few well ebtablished companies (Shell, CIBA, Bittar Group) apply for tenders. For each chemical only one or few apply as if there is a market sharing agreement between those companies.

2.3 Foreign Trade Activities by the Private Sector

While the role of the government sector in foreign activities has considerably increased, the private sector still plays a significant role in exports and imports. Livestock and sorghum are entirely undertaken by the private sector. Also, the private sector shares in the export of oil seeds, oil seeds cakes, vegetable oil and other exportable items. Similarly, several of the imported items are undertaken by the private sector.

With regard to export, a license has first to be obtained. In every transaction the exporter has to submit a form and obtain approval of an authorized commercial bank. All commodities are subject to minimum export prices. The proceeds of export must be repatriated within four months from the date of shipment. Prior to the Balance of Payments problem the authorized dealers were allowed to retain up to 75 per cent of export proceeds for import financing. With the worsening Balance of Payments situation this per cent shrinked to much less than 75. Retained foreign exchange must be kept with local banks and is required to be sold to an authorized dealer if not utilized within a specified period.

To the private exporters the incentive for underinvoicing is very high. This is so because the price differentials between the official exchange rate and free-exchange rates are very substantial. Given the fact that the Bank of Sudan has reduced the per cent retained by exporters the latter have strong attraction to adopt underinvoicing tricks. We have attempted to undertake partner countries comparative study in order to detect underinvoicing. The statistics provided by the customs department in Sudan is compared with data provided by partner countries for sorghum and livestock. The study did not confirm or disprove our suspicion. This is so because of errors in reporting the data.

Other than underinvoicing it came to our knowledge that an exporter may actually avoid transfering the entire value of some transaction by simply getting the papers lost. Since there is no coordination and follow-up this is likely to take place though it is not known to us what exporters exactly do. While it is difficult for every exporter in each transaction to undertake such a way of retaining foreign exchange abroad, it is very likely that at least some amount of export proceeds remain abroad through this or other trick.

What makes it difficult for us to detect such possibility for the case of livestock is the presence of widespread smuggling to the major partner countries. According to one UNCTAD/GATT study "smuggled animals are regularly received in Saudi Arabian parts and welcomed to the extent that no health certificates are required for them".[11] The Livestock Marketing Public Corporation estimated that 71,052, 120,000 and 168,652 of cattle, camels and goats respectively were smuggled in 1978 to Egypt, Libya and Saudi Arabia. This was valued to be over LS.23.8 million, a significant portion of total exports of livestock at that year. Table (10) below gives breakdown for the smuggled animals by country and the total value of these animals. Table (11) compares these numbers with the ones provided by the department of customs as to have been exported officially. The per cent of smuggled livestock to exported ones is very high.

Table (10) : Smuggled Livestock, 1978

	Eypt	Libya	Saudi	Others	Total No.	Value (000 LS.)
Cattle	-	-	1052	70,000	71,052	7,105
Camels	40,000	80,000	-	-	120,000	12,000
Goats	-	-	1680652	-	1,680,652	4,722,256
TOTAL						23,827,456

Source : Estimates made by the Livestock Marketing Public Corporation

Table (11) : Smuggled and Exported Livestock, 1978

	Smuggled		Exported	
	Quantity	Value (LS.000)	Quantity	Value (LS.000)
Cattle	71,052	7,105	10,666	1,003
Camels	120,000	12,000	3,751	314
Goats	1,680,652	4,772	11,852	106
TOTAL		23,877		1,420

Source : Bank of Sudan Report, 1979 and Table (10) above.

As to imports the chances of overinvoicing are becoming less and less possible due to changes in the modes of financing the privately imported items - and due to the recent developments within the foreign exchange systems in the country. The classical procedure for financing all imports, including those undertaken by the private sector is through foreign exchange proceeds of exports. The allocation of foreign exchange is done by the Foreign Exchange Budget Committee (FEBC).[12] The latter was formed in 1972 with the objective of allocating foreign exchange over priorities set by the overall economic policy. To achieve the best allocation of foreign exchange the committee prepares estimates of expected earnings and weigh them against the competing demand for foreign exchange for government imports, commercial imports and private sector industrial requirements.

On their turn, private importers first obtain import licences from the Import Administration in the Ministry of Commerce. Licences are classified according to the type of commodity. Essential Commodities are included in the Open General License and are given priorities. Others are considered to have low priorities. For the importers to get foreign exchange he/she has to validate his/her license by the Exchange Control Section in the Bank of Sudan. Due to a recent foreign exchange squeeze in the country many importers are turned down. In particular, all non-essential goods can not be financed through the foreign exchange proceeds. Even some of what was initially classified as essentials such as pharmaeceuticals, medicine, spare parts, .. etc. have sometimes to be financed through alternatie sources. Variety of sources developed.

In 1971 importers were allowed to bring in imports through the "Nil Value System". According to this system an applicant was to be issued a licence to import certain commodities provided he/she arranged the foreign exchange needed. The idea was to attract savings of the Sudanese working abroad. In 1972/73 commodities worth of LS.17.8 million were imported through the Nil Value System. By 1973/74 this jumped to LS.29.2 million.

Another system which gained importance was suppliers credit which was especially encouraged after 1971. Thus, it was announced that importers stood a better chance of obtaining licenses, the longer the payment period, and the lower the interest rate. Imports allowed under this system were at first mainly investment and related goods. Stringent conditions about periods of payment and interest rates were required. Later on essential goods were also included in the list for this type of finance. Gradually non-essentials were included in suppliers credit.

It should be noted that supplier credits relieve the Balance of Payments only temporarily, and the worse their overall terms, the less is the relief. The situation is worse still, if credit facilities obtained in such a manner are used for consumer and not investment goods. Yet policy makers at the Import Administration, caught between future payments, or shortages in basic commodities, were forced to extend the list to include consumer goods together with investment goods and other manufacturing sector needs which failed to be met from foreign exchange budget allocation.

Another source of finance is to buy foreign exchange from the free market. With the increase of the number of Sudanese working in the noughbouring oil producing countries the potential for foreign exchange remittances has increased. Part of these remittances followed the official commercial banks channels. The rest is sold at a free foreign exchange market which has eventually been legalized. Consequently several of the imported items started being financed through this market.

This created a situation where different imported commodities are financed differently. One group is financed through proceeds of exports; another group is financed from suppliers credit-which will eventually have to be repaid from export proceeds. And yet, a third group is financed from foreign currency obtained in the free market. By 1983 the list of items financed by the first source has been reduced to basic essentials such as oil, sugar and agricultural inputs.

2.4 Quantification of Leakages on Merchandize Trade

In order to quantify leakages on foreign exchange we estimate the per cent of losses of foreign exchange due to differences in prices and smuggling. As stated in the introduction, these leakages include both those of first order (capital flight) and of second degree order (foreign exchange smuggled back into the country but misused). With regard to exports, we estimated leakage coefficients for cotton, groundnuts and livestock from which we derive a weighted average for all exports. For the 5 years 1976/77 - 1980/81, the average differences of prices between Egypt and Sudan was 20.6% (for the same extralong staple cotton variety). We make the arbitary assumption that only 50% of this difference could have been avoided if better marketing procedures, storage or transportation facilities were undertaken. Thus, the coefficient of foreign exchange leakage in cotton has been 0.103. Taking the price differences in Europe and Sudan for groundnuts (shelled), groundnuts oil and groundnuts cake and allowing for 10% of freight and insurance costs we arrive at a coefficient of 0.071% on groundnuts and groundnuts products which we take as representiative for oil seeds. Leakages as a result of smuggling is found to be extremely high (13) and (14). For a number of years smuggled livestock is found to be more than the officially exported number ([illegible]) and. Nevertheless, we take a conservative estimate of 0.25 as the coefficient for leakage in livestock which we also take as representing that of sorghum. The latter is ~~high~~ Largely smuggled especially when there are droughts in noughbouring countries. With a ratio of 54:25:19 for cotton, oil seeds and total of livestock and sorghum - alltogether taken to represent exports, we stimate the weighted average coefficient of leakages in exports as 0.135.

As to imports we estimated leakage coefficients of 0.192 and 0.046 for petroleum products and sugar respectively. These two imported items are taken to represent government foreign purchases. Hence, the leakage coefficient for government imports is estimated to be 0.136. Since, virtually the entire private imports are financed from the free market we assumed no overinvoicing in private imports. With the average per cent of government imports out of total imports to be 44.5% the weighted average coefficient for leakage of total imports (private and public imports) is estimated to be 0.061. Table (12) below gives estimates of leakages on total imports and exports for 5 years.

3. Capital Flow

3.1 The Evolution of New Foreign Exchange Systems

Sudanese labor migration to the oil exporting Middle Eastern countries accelerated in the 1970's. As the oil prices rocketed in 1973, oil exporting countries accumulated huge surpluses and they

Table (12) : Leakages in Merchandize Trade

($ m.)

		1977/8	1978/79	1979/80	1980/81	1981/82
1.	Exports	551.0	527	582.5	478.9	381.6
2.	Imports	1188	1137.9	1339.9	1631.4	1798 .9
3.	Leakages on Exp.	74.4	71.1	78.5	64.7	51.5
4.	Leakages on Imp.	72.5	69.4	81.7	99.5	109.7
5.	Total leakages	146.9	140.5	160 .2	164.2	161.2
6.	Leakages as % of Exports	26.7%	26.7%	27.5%	34.2%	42.2%

Source : IMF, Sudan, Recent Economic Development, August 23, 1982.

NOTE : The weighted average coefficient of leakage for export is estimated to be 0.135 while the weighted average coefficient of leakage for import is estimated to be 0.061.

started ambitous economic development programs. The increase in the demand for labor in those countries resulted in widening the gaps in wages between the oil exporting countries and the other countries. This set in motion a high unidirectional labor mobility in the region. Sudan and other non-oil exporting countries have experienced rapid labor out migration.

The increasing number of Sudanese workers abroad led to more inflow of remittances into Sudan. This resulted in drastic changes in the system of foreign exchange transactions in the country. In the early 1960's after the establishment of the Bank of Sudan the Sudanese pound used to be tied to the poind sterling and later (1971) to the US dollar. During that time a (more or less) strict exchange control system was in operation. First, the exchange control authorities at the Bank of Sudan and later (1972) the foreign exchange budget committee (FEBC) at the Ministry of National Economy were responsible for the allocation of foreign exchange. The FEBC, first, makes estimates of expected foreign exchange earnings of the country from exports or invisible surplus which are supposed to be surrended by exporters to the Bank of Sudan at the official (overvalued rate), then allocates it between competing claims. These - as mentioned earlier - are mainly government purchases (a sizeable proportion of imports), imports of the industrial sector and commercial imports. As expected, claims on the limited foreign exchange resources normally exceed supply, and, hence, foreign exchange would have to be rationed. As all foreign exchange is handled through official channels at an overvalued rate there is an incentive both for over and underinvoicing (and also smuggling). In the Ministry of Industry, for instance, the Ministry allocates foreign exchange apportioned to it by the FEBC, according to (mainly) installed capacity of different factories. The response of many old firms was to add to their installed capacity and for new entrants to apply for huge capacity factories.

The import system prevailing during this period first depended completely on foreign exchange available through export earnings. In September 1979, a parallel market was introduced by the central bank with the objective of attracting more remittances. Immediately after introducing the parallel rate, approximately 6% of exports and 48% of imports, specified invisibles, cash loans and debt servicing were effected through this new rate. Subsequently, more items were shifted from the official to the parallel market rate. On September 1980, 60% of exports and 56% of imports were transacted through the parallel rate. One year later the official old rate was applied to only 5 essential commodities (wheat, sugar, petroleum products, milk and pharmaceutical), some capital items, official debt repayment and some official invisibles. This in effect meant that most of the items dealt with by the private sector were imported through the parallel market or other non-official sources. Since the parallel rate was closer to the black market rate than the official rate incentive for underinvoicing and overinvoicing was minimized.

Afterwards, private importers have gradually been deprived from access to official foreign exchange at any side. More and more reliance on remittances has been developed. The use of the savings of Sudanese working abroad for financing imports was legalized first through the Nil Value System referred to earlier. In that system, the importers had directly to approach Sudanese abroad and to make deals to pay them in local currency, inside the country.

In Sept. 1979, residents and non-residents were allowed to have accounts with Sudanese Banks denominated in foreign exchange. All restrictions on foreign exchange transfers were also lifted so that any body, national or foreigner can bring in or take out any amount of foreign exchange. This was meant to attract savings of Sudanese working abroad through banking channels. By that time there was an already existing unofficial foreign exchange market in which some savings of Sudanese working abroad were injected. Foreign exchange buyers and sellers were interacting for years and in order to organize this market a system of licensing for foreign exchange dealers was introduced in July 1981. Dealers were required to register and deposit an insurance with the Bank of Sudan. Since the deposit required was very large many foreign exchange trades could not obtain licenses. Nevertheless they kept competing with the licensed dealers in buying and selling foreign currencies.

The increase in the volume of transactions and the re-direction of the inflow of foreign currency from the commercial banks to the licensed and unlicensed dealers resulted in a situation where a large supply of foreign exchange was not under the control of the Bank of Sudan. The implication of such situation is that the foreign exchange obtained through remittances could not be rationally allocated for financing the most needed imports. Moreover, severe fluctuations in the free rate of exchange created uncertainty and encouraged speculation. The Bank of Sudan was not able to know-let alone control - the inflow of foreign exchange, and, hence could not precisely identify the impact on the supply of money. The commercial banks which were isolated from the increasing foreign exchange transactions asked to be allowed to operate foreign exchange houses in which free market rates are to be offered. The dealers market was, hence, enlarged.

To recapitulate, the evolution of the foreign exchange systems resulted in three markets. First, there has been the official foreign exchange market in which foreign exchange is obtained from export proceeds. The allocation of foreign exchange in this market is undertaken through FEBC. Exporters are obliged to submit foreign exchange proceeds and importers are to compete for foreign exchange. For both groups a fixed - pegged exchange rate is applied which is far away from reflecting the true scarcity of foreign exchange. Second, an authorized dealers' market emerged operated by commercial banks' exchange houses or independent individuals. Though the rate of exchange in this market is largely determined by the forces of supply and demand there has been attempts by the Bank of Sudan to influence this rate. Thirdly, there is an unauthorized dealers' market. Several buyers and sellers of foreign currencies are scattered around Airlines and Khartoum Airport approaching travellers. Despite close interdependence in the rates of the three markets, these rates differ from one another. The exchange rate for US dollar is higher in the unauthorized market and is lowest for the official exchange market.

The foreign exchange acquired in the authorized or unauthorized dealers markets is used for financing imports (especially of nonessential goods), for capital flight and/or for speculation. Imports of goods through what is labelled as "own foreign exchange sources" - as distinguished from export proceeds - have been encouraged. At times the Bank of Sudan demanded that importers submit certificates showing that foreign exchange is obtained from authorized dealers. But since it is well known that substantial amount of foreign exchange circulate among unauthorized dealers this condition has been removed.

For wealth owners, foreign currencies provide alternative assets for portfolio diversification. Since at this conjuncture, the Sudanese economy is characterized by "substantial deficit in the Balance of Payments and has experienced successive devaluation; currency speculation is widespread. With continuous depreciation of the Sudanese pound, officially or in the free market, it is a rewarding and rational optimization behavour to hold foreign currencies.

If these speculators are only hedging against the depreciation of the Sudanese pound they may resort to deposit their foreign exchange holdings inside the country. But, some of them are also hedging against political upheavals which are likely to threaten their properties. Hence, they may choose to keep at least part of their holdings in foreign banks. This is especially true for those who get enriched illegally through corruption or black market. Again, it is difficult to quantify the amount of foreign exchange losses through capital flight. The existence of such widespread capital flight is noticed by Bank of Sudan officials, other bankers and those close to the business circles. Statistics obtained from customs department revealed some arressts of such smuggling of currencies out of the country. In 1975 the First Conference on Smuggling, several cases of currency smuggling were reported to have been discovered. Similarly, the Third Leadership Conference of the Department of Customs (1983) revealed widespread currency and goods.smuggling. Evidently the reported arrests of currency smuggling do not reflect the real magnitude of capital flights since the larger part of smuggling goes unnoticed. In the following subsection we device a technique for quantifying the extent of foreign exchange losses in the free foreign exchange market.

3.2 Remittances

The number of Sudanese working abroad increased many folds since 1973/74. The exact number of these immigrants (mugtarbeen) is not known. Mohamed A. Galalel Din (1980) estimated the total number to be over 231,000 in 1977.[15] Attaitalla (1982) put 214,780 as an upper limit in 1978/79 but has been chosen a very conservative estimate of 78,000.[16] The Department of Labor estimated their number to be over 330,000 in 1981. Some others gave an estimate of 500,000 (World Bank (1980), IMF; 1983).[17] Table (14) shows the estimates of Galalel Din and of the Labor Department by country.

The exact amount of remittances is not known since there are different channels through which they are sent. Table (13) gives the annual remittances through the banking system for the period 1970-82.

Table (13) : Remittances in Cash Through Banks

LS. million, 1970-82

1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
0.4	0.4	1.1	1.2	1.3	2.3	5.9	14.1	27.1	33.2	28.2	47.4	48.9

Source : Compiled from Department of Foreign Exchange, Bank of Sudan.

Remittances through the banking system is only a small portion of total remittances. This is a result of rate differentials between the official rate and the free market rate. Recently, commercial banks are allowed to operate foreign exchange houses and to compete for foreign exchange through the free rate. Yet, the share of the banking system of total inflow is small. The rate offered by other dealers is higher. Rates offered by the banks are subject to direct influence from the central bank and, hence, is controlled at less than the non-bank free rate. Another reason for migrants not to remit through the banking system is given by Attaitalla.[18] According to the latter,

Table (14) : Official Estimates of Sudanese Working Abroad

	Number in[1] 1977	Number in[2] 1981
Egypt	45,000	45,000
Saudi Arabia	140,550	191,831
Libya	20,000	32,950
Emirates	12,000	26,400
Oman	1,800	3,960
Qatar	2,500	6,000
North Yemen	800	6,000
Jordan	300	600
Bahrain	100	220
Lebanon	500	1,000
Nigeria	500	1,000
United Kingdom	1,500	3,000
Greece	300	600
Others	2,000	4,000
	231,350	330,260

Table (14) : (Conted')

(1) Source : Estimate by Dr. Mohamed El Awad Galalel Din, Emigration from Sudan Abroad, ESRC Khartoum, 1979.

(2) Source : Estimate of Labour Department, Khartoum, 1982.

"the narrow spread of commercial banks make it more convenient that migrants sent their money through relatives who deliver the money directly to relatives". Table (15) below reveals that only 22.7% of interviewed immigrants in Saudi Arabia claimed that they transfer some of remittances through the banking system. The rest either carry their own savings into the country, sell it to currency dealers or send it through relatives.

Table (15) : Channels of Remittances

	Per cent
Banks	22.7
General Traders	15.8
Currency Traders	51.7
Others	9.8
TOTAL	100

Source : Abdalla E. El Ghol, Notes on Immigrants, Council for Economic and Social Research Periodicals No. 93, June, 1982, (in Arabic).

In order to arrive at an estimate of potential and actual remittances we take some estimates of incomes, savings and transfers of Sudanese working abroad. To make these estimates we assumed the number of Sudanese working abroad to be in the range of 300,000 - 500,000. According to El Ghol's survey in Saudi Arabia referred to earlier, the average savings of a migrant is $ 687 per month. We found this to be highly exaggerated since it constitute 0.78 average propensity to save judged on the average income given by the same study. It is quite evident that the immigrants pass the break-even-points and realize great savings. This is not only because immigrants are observed to become thrifty during their stay abroad but also because their incomes are much higher than in Sudan. But the fact remains that migration itself brings with it certain obligations, e.g., travel and gifts to relatives. We assume the average savings for Sudanese working in all countries to be 20% less than the estimate given by El Ghol - leaving us with US $ 549.6 per month. It also seems reasonable to deflate the estimate of El Ghol because incomes are higher and the cost of living is lower in Saudi Arabia than many other countries - though Saudi Arabia has a large proportion of Sudanese working abroad.

Total savings, then, range between $ 1.979 - 3.298 billion. But it should be remembered that not all savings are transferred to Sudan. Immigrants have the option of keeping a portion of savings in a bank abroad. The propensity to deposit savings abroad depends on obligations in the country, government policies and speculation regarding the exchange rate for the Sudanese pound. In particular, the frequent and unpredictable changes in policies lead immigrants to shy away from depositing savings inside Sudan. El Ghol reported that monthly remittances are $ 220 per month. Deducting 20% of this leave us with $ 176 monthly remittances per migrant. Hence, total remittances range between $ 634 - 1,056 million. Table (16) shows these estimates. The potential savings are very substantial and only around one third of them are remitted into the country.

Total remittances range between $ 634 - 1,056 million. The question is whether these remittances are rationally used or not. There is a widespread belief that the free market for foreign exchange provides a major source for capital flight. It has been reported to us that several foreign and national firms are involved in transferring profits and wealth abroad. A number of merchants of foreign origin and who have been in the country for more than fifty years (Syrians, Americans, Indians, Greek) are reported to have sold much of their property, converted the value into dolars and left the country. One customs officer reported to have witnessed a passanger leaving with five and half million dollars in cash, while others have reported less but quite significant amounts leave the country (officially) through customs.

Table (16) : Estimates of Incomes, Savings and Remittances of Immigrants

		Month/migrant ($)	Total Annual for all migrants (million)	
			Lower Limit	Upper Limit
1.	Incomes	706.1	2,542	4,237
2.	Savings	549.6	1,979	3,298
3.	Remittances	176.0	634	1,056
4.	Savings-Remittances	373.6	1,345	2,242

Source : Own Calculation based on modified estimates of El Ghol (1982).

NOTE : Lower and upper limits are based on estimates of immigrants as 300,000 - 500,000.

In addition to capital flight the free market provides an increasing means of financing the imports of several items. This helped in releasing the pressure on foreign exchange earned through exports. In fact a very significant portion of imports are funded through foreign exchange obtained in the free market. Nevertheless as stated by an IBRD report, "even this contribution was not entirely positive, for many of the imports under the nil-value license scheme were of non-essential commodities, many of which - especially passanger cars - led to further foreign currency expenditures on spare parts and fuel" (IBRD, Feb., 1982, p. 120).[19]

It has been argued earlier that remittances or foreign exchange sold at the free market is used either by importers, speculators or for capital flight. From a macro perspective, both capital flight and speculation constitutes a 100% leakage on foreign exchange. Importation of non-essentials also constitutes a misallocation of scarce resource. From the micro levels, studies showed that the individual migrants spend their savings unproductively. Three studies undertaken by Galalel Din, Attaitalla and Ali Abdalla (1982)[20] respectively confirmed that a high per cent of transfers are intended for consumption activities. Between 15 - 30 per cent of transfers go for marriage expenditure. In fact the average expenditure on marriage has increased tremendously as a result of the influence of the immigrants (mugatribeen). Since customs required that the dowry should include cloths, perfumes, ..etc., the mugatribeen raised the expectations through increasing the value of these items.

Another important expenditure item for immigrants is owning a house. (25 - 37% reported that their main aim is to own a house). Consequently a construction boom developed in the urban centers. Since structural and resource constraints have not allowed for a responsive supply of building materials the costs in construction increased higher than the average rate of inflation. Prices of urban houses are inflated substantially.

3.3 Other Capital Flows

Apart from the inability to attract a large part of the savings of Sudanese working abroad and apart from misuse of remittance and capital flight, the most serious leakage in capital flows is that arising from external debt. External indebtedness was estimated to be in excess of US $ 7 billion. An IMF report projected that interest and principal payments are about US $ 1.1 billion. As a result the debt serving ratio reached over 45% - despite debt rescheduling by major creditors.

The direct cause of this increasing indebtedness is the rising trade and current accounts deficits. Deeper reasons are the decline in agricultural productivity and deteriorating terms of trade. However, what makes things worse is that there is a tendency to use more and more of commercial loans than official loans - resulting in more borrowing at very unfavourable terms. According to IBRD report, of a total of US $ 2.5 billion loans contracted between 1973 and 1977, US $ 1.5 billion was contracted on relatively hard terms. The debt profile has been changing towards harder terms, averaging 7.2 per cent interest, and a maturity of 9.2 years, including 3.0 years of grace (implying a grant element of only 12.1 per cent at the standard 10 per cent discount rate).

Table (17) : Intended Use of Savings by Migrants According to three Surveys

		Galalel Din[1]	Abdalla[2]	Attaitalla
1.	Investment in Agric.	4	28	13
2.	Commerce	7	2	17
3.	Vehicles and trans.	23	7	7
4.	Resturant and hotels			3
5.	Industry and Equip.	6	-4	2
6.	Private car	-	11	5
7.	Marriage	17	26	20
8.	Housing	25	26	33
9.	Improving Family cond.	22	-	-
10.	Study abroad	-	-	-
11.	Others	3	-	-

(1) Mohamed El Awad Galalel Din, Some Aspects of Sudan Emigration to the Oil Producing Countries, Mimo, 1980.

(2) Ali Abdalla Ali, Sudan Emigration Yemen, Economic and Social Research Council, 1982.

(3) Mohamed Attaitalla Abdalla, The Economic Causes and Consequences of Labour Migrant from the Sudan : An Empirical Investiation, Ph.D. dissertation, Univ. of Sterling, 1982.

4. Non-financial Leakages

4.1 Manpower drain

While on the positive side out migration of Sudanese to the oil producing noughbouring countries has increased the inflow of remittances, on the negative side it has resulted in a severe drain of human resources. This is mainly because the majority of emigrants are highly trained. According to Galalel Din and Attaitalla, skilled laborers accounted for over 65% of the total number of emigrants. The number of professionals, accountants and technicians exceed 25%. (See Table (18)). Another survey revealed that migrants have much higher levels of literacy and education than an average cross-section of Sudanese population. Nearly 60%

of emigrants had at least secondary school education. Most had been employed for some years and acquired in the job training (ILO, 1983, p. 79).(21)

The direct effect of emigration was experienced by both commodity-producing units and social services supplying units. The manufacturing sector has been hardly hit by the high labor turnover and the drain of technicians and skilled laborers. The emigration of teachers and university lecturers resulted in deterioration in the quality of education. As to farm laborers there is no evidence of a significant effect of education. But evidently this will likely increase the already noticed shortages in agriucultural laborer.

4.2 Degree of Processing of Exports

Exports are as yet predominantly agricultural non-processed crops. The average per cent of agricultural exported crops as a percent of total export has been 96.8 for the last 5 years as shown in Table (19). Cotton, oil seeds, gum and sorghum account for more than 85% of exports. The degree of processing these crops is very small. In fact only very small proportion of cotton is locally processed. Textile industry cannot satisfy the domestic market let alone exports. Attempts to develop spinning process were met with failure so far due to high costs of production. Processing of oil seeds is much more than any other agricultural crop. The edible oil industry is the largest exporter of industrial products in the Sudan. However, even this industry is surrounded with formidible problems to the extent that it is more profitable to the firms to export non-processed groundnuts or sesame than edible oil.

5. Policies to Combat Leakages

In the previous sections we have tried to describe and quantify foreign exchange leakages in the Sudan. When quantification was attempted, the magnitude proved to be substantial by any standard (Table 12 p.23). In this section we sum-up the major findings and consider some policies to combat different

Table (18) : Occupations Abroad

(per cent)

		Attaitalla	Galalel Din
1.	Unskilled worker	31	11.2
2.	Farmers	-	-
3.	Skilled Worker	16	38.6
4.	Clerks	9	
5.	Accountants	15	9.6
6.	Technicians	9	22.
7.	Professionals & Administ.	14	12
8.	Unemployed	5	6.6

Source : Mohamed El Awad Galalel Din, Some Aspects of Sudanese Emigration to the Oil Producing Arab Countries, 1980.

Table (19) : Agricultural Exports and Total Exports

Year	Agric. Export	Total Exports	% of Agric. to
1977	210.2	229.3	92
1978	202.3	202.3	100
1979	232.8	252.8	92
1980	271	271.3	100
1981	357	357	100
AVERAGE	254.7	262.5	96.8

forms of leakages.

It is our contention that one of the most damaging forms of leakages has been the direct capital flight through smuggling of foreign exchange bought in the new free foreign exchange market. We believe that for an underdeveloped country like Sudan with weak accounting systems, ineffective taxation department and worsening investment environment (both for economic and political difficulties) lifting of all restrictions on foreign exchange transfers and movements can only lead to capital flight and misuse of scarce funds. New and old investors alike will be uncertain of safety of their assets and under such circumstances only minimum assets will be left in the country, perhaps most operations carried through Bank (mostly public owned) advances. Complete trade and payment liberalization attempts under the circumstances are a definite recipe for disaster and a sure way for the country to loose not only fruits of its hospitality for both foreign and local investments over the years, but also its economic and political independence, which are sure to be mortgaged for survival (to keep the country floating). Removal of distortions in the economy in this partial manner could never be hoped to achieve its objective. The most that could be allowed concerning the exchange rate and the trade regime would be a mix of taxes and subsides that will give due incentive to exporters and realistic rate to importers together with a tight exchange control system and a strong foreign exchange planning agency.

The issue of remittances requires on the one hand appropriate policies to attract more transfers into the country - preferably through banking channels, and on the other hand, appropriate policies to allocate foreign exchange in a rational manner. In the pre-1979 period a number of measures were taken to mobilize emigrants, savings and syphon them through official banking channels. Examples of countries were such remittances had a significant effect on Balance of Payments are many, including, Yougslavia, Turkey, Morocco, Tunisia, Algeria, North Yemen and Egypt. Transfers of Sudanese working abroad could have been larger if more appropriate and stable policies were undertaken. The certainty and instability of both the measures taken and the political system seem to be important factors for causing remittances to be directed through non-official channels. With the post 1979 liberalization attempts, incentive measures previously given (e.g. land, duty exemptions) were withdrawn while the premium given through the government's parallel market was below that of the "black" free-market. Thus, although foreign exchange is now legal to import it is still more profitable to do so through non-official channels. Given the estimates of the potential remittances, a policy that is designed to attract such remittances is urgently needed.

A major leakages towards which efforts should also be directed is smuggling. The main forms are in livestock, oil seeds, sorghum and gum arabic. The conditions under which smuggling becomes profitable relate mainly to whether the price differences warrant the risks. Given that these differences are directly related to low prices and the overvalued exchange rate paid to exporters plus export taxes, the situation can be contained through appropriate tax-subsidy measures (or appropriate effective exchange rate) and fair prices. What remains of unrecorded trade could be dealt with on case-by-case bases.

Regarding the expertience of import-substitution in the Sudan, like many LDC's, the experience left much to be desired. The generous concessions extended by the government, plus active participation by the government itself did little to improve the performance of the import-substitution sector. Studies carried out showed that the pattern of import-substitution that resulted was capital, skill and foreign exchange extensive. Domestic resource costs of saving foreign exchange through import- substitution were shown to high - indeed in some cases import substitution activities were foreign exchange users (rather than savers). The disappointing experience of the import - substitution sector is by no means Sudan-specific and so do the policy-mixes suggested. Here, however, we can point out that if appropriate care is taken, concerning preparation (suitability) of industrial ventures, their execution and administration, a much improved performance could be expected. In Sudan, many factories costing millions of dollars stay idle either because they are not completed or because of major technical defects (Asalya Sugar Factory) or because ill-studied projects (Babanosa Milk Factory).

A major contributing factor in almost all forms of leakages is corruptive practice. This is a thorny area but is perhaps a fact of life. In Sudan, it is reported that between 1979-82,

(811) cases of financial excessiveness were reported by the general auditors office involving millions pounds, out of which only 51 cases were tried in courts. Political and bureacratic corruptions are perhaps, functions of political-cum-social conditions and set-ups. Despite the risks and difficulties involved in analyzing them, they remain. Although one can say that they exist in a form or another in all societies it seems safe to say that they flourish under authoritarian regimes, a sad situation that transcends many African countries. As far as Sudan is concerned corruptive practices seems to be a real and an important factor not only in squandering the country's foreign exchange but also in damaging its overall economy. The importance of taking prompt measures could not be underestimated.

The data on invisible was particularly weak but an overview of the problem was attempted. Minimizing leakages in this area seems likely only through long term solutions, investing in health, education at home and in national shipping and airlines. Due to sizeable capital requirements and scale economies, African or regional (East, West-African) approach for such forms of leakages like freight and insurance seems to be appropriate. Efforts that are already underway are a welcome step in the right direction. Regarding other forms, e.g., education, health, travel, it is very difficult to assess the magnitude of leakages by separating necessary from unnecessary leakages. Nevertheless, in Sudan significant increases of budgets to reinforce highly demanded services should be strongly advocated to reverse the trend of the increasing dependence on foreign countries for such services.

FOOTNOTES

1. This definition has been suggested during the workshop on Financial Leakages in Africa organized by the ECA and held in Addis Ababa during the period 7 - 10 Jan. 1983.

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