

494196

MONEY AND MONETARY POLICY IN A HIGH SURPLUS
LOW POPULATION ECONOMY (KUWAIT 1962-82)

BY OMAR ISMAIL KASSEM

**DISSERTATION FOR THE DEGREE OF PH.D. IN ECONOMICS,
SCHOOL OF ORIENTAL AND AFRICAN STUDIES,
LONDON UNIVERSITY**

ProQuest Number: 11010634

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 11010634

Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

ABSTRACT

This thesis examines money problems and policies in Kuwait, a capital plenty economy, during the period studied.

Kuwait's balance of payments surplus has allowed it to continue to cover the domestic note issue by foreign reserve until today, whereas most developing economies have found this a constraining vestige of monetary arrangements in British colonial days and have legislated to give their central banks more flexibility.

Due to the country's surplus, the commercial banks built up large holdings of foreign assets over the period 1962-1980, chiefly in the form of short-term money market deposits with banks abroad. Whereas the Central Bank of Kuwait started implementing monetary reforms from 1973, the independence of the commercial banks due principally to their liquidity, meant the central bank had little success in controlling the money supply until 1979, when it exploited the growing lack of liquidity among commercial banks to strengthen its control over their reserves.

The analysis of the determination of the growth of the stock of money in Kuwait over the period 1962-80 needs to take account of the role of the commercial banks and their foreign assets in the rapid growth in lending, which began in 1972. Whereas we find high-powered money an important determinant of the growth of the money stock, the bank reserve ratio plays a significant role.

The growth of the stock market in Kuwait was the main cause of the growth in lending after 1972. The Central Bank of Kuwait saw its main objectives as controlling the speculation and credit explosion connected with the stock market.

The Kuwaiti Dinar was established by Britain at the time of Kuwait's political independence. The benefit to a country like Kuwait of having a separate currency would appear to be extremely limited. The Kuwait government have followed a policy of exploring possible monetary integration with neighbouring states, although we find this does not answer any specific economic problem in Kuwait. Meanwhile, the Central Bank of Kuwait has pursued a policy of maximum stability of the currency throughout the period under study, in order to minimize the risks of currency loss by the financial community, including the commercial banking system, which had substantial foreign asset holdings. This is of considerable importance because the commercial banks do not appear to behave in such a way as to hedge their foreign currency exposure.

TABLE OF CONTENTS

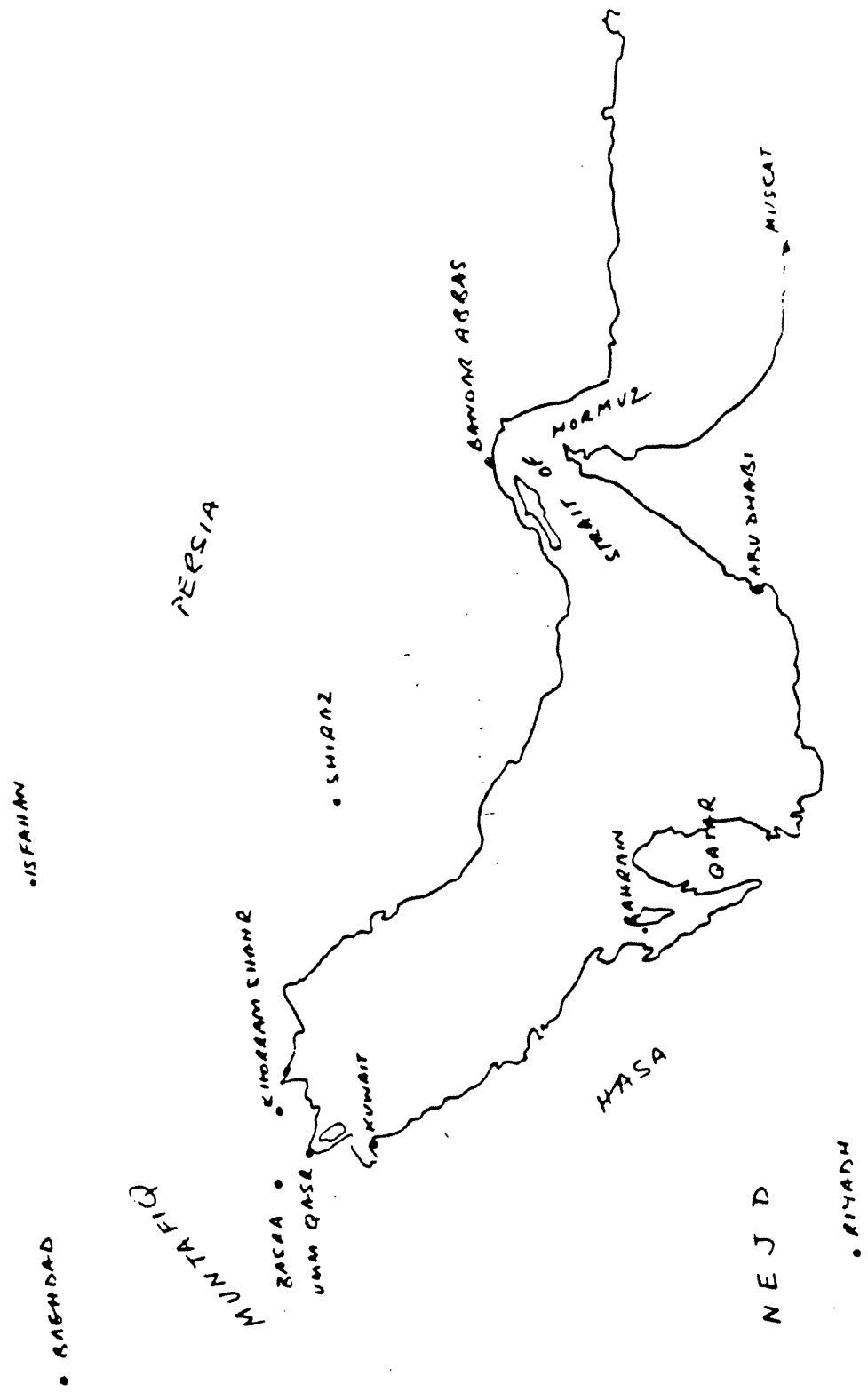
	<u>Page</u>
<u>CHAPTER 1</u>	
A Short Economic and Political History of Kuwait 1600-1965.	8
Figure 1:1	7
Table 1:1	14
Table 1:2	29
Table 1:3	31
Table 1:4	36
Footnotes to Chapter 1.	46
<u>CHAPTER 2</u>	
The Choice of a Currency.	53
Footnotes to Chapter 2.	79
<u>CHAPTER 3</u>	
The Determinants of the Supply and Demand for Money.	83
Table 3:1	114
Table 3:2	130
Table 3:3	150
Table 3:4	152
Table 3:5	155
Graph 3:1	120

Graph 3:2	Movements in the Money Supply and the Monetary Base 1962-1980.	121
Graph 3:3	Movements in the Banks' Reserve Ratio Adjusted and Unadjusted 1962-1980.	122
Graph 3:4	The Proximate Determinants of the Money Supply 1964-1980.	132
Graph 3:5	The Relationship between the Turnover in the Stock of Money (M2) and the Turnover in the Stock Exchange 1973-1980.	148
Footnotes to Chapter 3.		167
<u>CHAPTER 4</u>	The Financial Institutions and the Relationship between the Banks and the Stock Market.	179
Table 4:1	The Financial Institutions in Kuwait as at December 31st 1980.	180
Table 4:2	The Money Multiplier in Kuwait 1963-1981.	184
Table 4:3	The Money Multiplier (m) for Sixty-Eight Less Developed Countries (1976).	187
Table 4:4	The Consolidated Balance Sheet of the Commercial Banks 1965-1980.	199
Table 4:5	Analysis of the Foreign Assets, Foreign Liabilities and Deposits of the Commercial Banks 1963-1980.	201
Table 4:6	The Composition of the Foreign Assets of the Commercial Banks 1973-1980.	203
Table 4:7	Analysis of the Portfolio Movements and the Funding Base of the Commercial Banks 1971-1980.	204
Table 4:8	The Deposit Structure of the Commercial Banking System by Type of Deposit and Sector of Origin 1971-1980.	205
Table 4:9	Classification of Domestic Bank Credit by Economic Sector 1970-80.	206
Table 4:10	Growth Rate of Domestic Bank Credit by Economic Sector 1972-80	207
Table 4:11	Assets and Liabilities of Bahraini Offshore Banking Units 1975-1980.	208
Table 4:12	New Bond Issues Denominated in Kuwaiti Dinars 1968-1980.	216

Table 4:13	Capital History of the Kuwaiti Commercial Banks Listed on the Stock Exchange 1952-1979.	257
Table 4:14	Market Capitalization of the Kuwaiti Commercial Banks on the Stock Exchange 1973-1978.	258
Table 4:15	Kuwait Stock Exchange All-Share Index 1973-1979.	259
Table 4:16	Weighted Average of Published Interest Rates Paid in Deposits and Charged on Discounts and Advances to the Private Sector 1971-1979.	260
Table 4:17	Net Financial Position of the Commercial Banks with the Central Bank 1969-1981.	261
Graph 4:1	The Money Multiplier in Kuwait 1963-1981.	189
Graph 4:2	The Ratio of Foreign Assets of Commercial Banks to Total Assets 1963-1980.	223
Graph 4:3	The Ratio of Net Foreign Assets of the Commercial Banks to Deposits 1963-1980.	224
Graph 4:4	Composition of the Foreign Assets of the Commercial Banks 1973-1980.	225
Graph 4:5	Deposit Structure of the Commercial Banks by Type of Deposit 1971-1980.	226
Graph 4:6	Index of the Changes in the Portfolio Behaviour of the Commercial Banks 1971-1980.	227
Graph 4:7	Kuwait Stock Exchange All-Share Index 1973-1979.	265
Footnotes to Chapter 4		284
<u>CHAPTER 5</u>	The Evolution of Central Bank Policy in the Credit Markets	290
Table 5:1	Balance Sheet of the Central Bank of Kuwait 1972-80.	299
Table 5:2	List of Major Policy Measures Adopted by Central Bank of Kuwait 1972-80.	300
Footnotes to Chapter 5		314
<u>CHAPTER 6</u>	The Evolution of Central Bank Policy in the Currency Markets.	318
Table 6:1	Import Weights for Kuwait's Major Trading Partners in Percentages 1975-1982.	349

Table 6:2	Export Weights for Kuwait's Major Trading Partners in Percentages 1976-1982.	350
Table 6:3	Bilateral Trade Weights for Kuwait's Major Trading Partners in Percentages 1976-1982.	351
Table 6:4	Bilateral Trade Weights by Currency of Denomination in Percentages 1976-1982.	352
Table 6:5	Crude Oil Trade Weights (Imports plus Exports) of the World's Major Economies in Percentages 1976-1982.	353
Table 6:6	Regression Analysis between the Kuwaiti Dinar and the Currencies of Kuwait's Major Trading Partners 1975-1982. The Estimates.	354
Graph 6:1	Index of the Changes in the Rate of Exchange of the Kuwaiti Dinar and the World's Major Currencies against the U.S. Dollar 1975-1982.	359
Graph 6:2	Index of the Changes in the Rate of Exchange of the SDR, the Kuwaiti Dinar and the Saudi Rial Against the U.S. Dollar 1975-1982.	360
Footnotes to Chapter 6		370
<u>BIBLIOGRAPHY</u>		376

FIGURE 1:1
MAP OF THE PERSIAN GULF



CHAPTER 1

A SHORT ECONOMIC AND POLITICAL HISTORY OF KUWAIT

i) THE EARLY PERIOD (PRE-1773)

Historical records on Kuwait on the period before the Second World War are unsatisfactory, in particular in so far as the economy is concerned. Nevertheless, a short description of developments in this period has been pieced together from a combination of primary and secondary sources, which will be useful background in our discussions in coming chapters on the social and institutional structure of Kuwait. Particularly important in this context is the large share of the private sector in the economy of Kuwait and its implications for the financial system.

By the seventeenth century, the Portuguese dominated Persian Gulf trade until 1622 when a joint Anglo-Persian attack seized the Portuguese trading base of Hormuz as part of a general campaign by the East India company of London to oust the Portuguese from the profitable trade between India and the Persian Gulf ports. At this time Kuwait was a summer resort of the Bani-Khalid who were the rulers of Hasa (the area from present-day Abu Dhabi to Umm Qasr - which lies between Kuwait and Basra).

Until 1773 Bandar-Abbas and Gombrun on the Persian littoral were the main centres of the East India Company in the Gulf. In this period there was a significant amount of trade between Bandar Abbas, Basra, Abu Shahr and Muscat on the one hand, and Bengal, Bombay, Madras and Surat on the other. (1)

The striking feature of trade between India and the Gulf was that in general India's balance of trade was positive, and that only a few items reached India from the Gulf. Those items were all exports from Basra and the Arabian littoral, and consisted mainly of dates and pearls. In 1790 records show that in fact, of the total value of date exports produced in the Pashaliq of Baghdad and exported from Basra, estimated at 1,000,000 Bombay Rupees, a large part went to India. Meanwhile the total value of the pearls estimated at 500,000 Bombay Rupees, and exported from Basrah, Kuwait and Bahrain, most went to India (2). Of the exports from India to Basra (3), only a limited part was consumed in the Pashaliq of Baghdad which was an extremely impoverished area, most of these goods being distributed, via Baghdad to the urban centres of the Ottoman Empire (4) and from there to Europe. Basra also re-exported some goods to Persia, and provided an important centre for the collection of numerous commodities from the Gulf, Persia and Europe, for export to India (5).

While Basra represented an important transit port and had a favourable balance of trade with the rest of the world, Persia and the Persian ports on the other hand represented an important consuming area. The favourable balance of trade of India with the Gulf consisted mainly of a favourable balance with Persia (6), and less significantly of a favourable balance with the Ottoman Empire and Europe through Basra and Baghdad. A certain Captain J. Malcolm provides us with the only estimates we have of the Gulf Trade in the eighteenth century (7). Malcolm estimated, in 1800, the value of the whole of the Gulf trade at 16,000,000 Bombay Rupees, the largest part of which covered the trade between India and the various parts of the Gulf. He estimated Persian imports from India at 2,000,000 Bombay Rupees with exports to India at

1,200,000 Rupees in merchandise and 800,000 Rupees in specie and bullion. He also estimated the deficiency in the balance of trade between Basra and India at 1,000,000 Rupees, also financed by shipments of specie and bullion. Basra's deficit was due largely to re-exports to the Ottoman Empire and Europe rather than domestic consumption in Basra and the Pashaliq of Baghdad itself.

The word 'Kuwait' originates from 'kut' or little fort and was part of Hasa, the lands of the Bani-Khalid. In the hinterland of Hasa, which represented most of the Eastern Littoral of the Persian Gulf except for Ras Al Khaimah and Muscat, was the Nejd from which most of present-day Kuwaitis originate. It appears from most of the histories of this region (8) that a combination of drought and tribal wars forced a small section of the Onaiza tribe out of the Nejd to present-day Qatar, then under the suzerainty of the Bani-Khalid. This can be said to be the origin of the Kuwaiti population of today. The Onaiza were not so much a tribe as a loose 'nation' of Arabs stretching from the empty quarter to Syria and Trans-Jordan. The Dahamshah section of the Amarat clan of the Onaiza was an obscure bedouin group when it arrived in Qatar and then proceeded to Kuwait to ask the Bani-Khalid for fishing and grazing rights in that area. As early as 1720 familiar names of the well-known Kuwaiti families crop up in the records. We hear of Al-Sabahs, Al-Khalifas, Al-Zayids (a grouping including Al-Ghanims, Al-Saqrs and Al-Dabbous), Al-Salehs, Al-Jalahimas (which includes Al-Nusf as an independent family), the Shamlan and the Maawidas. The period up to 1773 sees this grouping of bedouin (or the Dahamshah), who later became known as the 'Utub', still carrying on its nomadic function of sheep-grazing, but also beginning to settle on the coast around Kuwait to fish, and to collect pearls. Fishing was purely a subsistence activity, but pearling had many more implications. First of all, pearls

were an export commodity which meant travelling far to dispose of the goods for cash, thereby allowing the Kuwaitis the ability to import a variety of necessities and luxuries. Secondly, pearling required the use of ships (dhows) and therefore encouraged the development of shipbuilding as an industry. The teak and nails needed for the construction of ships were imported with the cash made in the exports of pearls. It is most probable that in this period the Kuwaitis were highly dependent on Basra and that their ships were still small and primitive.

ii) THE FORMATIVE YEARS AND THE MIGRATION OF THE 'UTUB TRIBE TO KUWAIT

The years 1773-1819 are an extremely interesting and complex period in the development of Kuwait. The first important set of influences involved the explosion of the Wahhabi movement in Nejd (Central Arabia). This area had always been troublesome and the troubles concerned mainly the ebbing fortunes of the Saud tribe based in the oasis of the Al-Dariyya (9). The Turks, ruling through the Sherifs of Mecca, had long been established in Mecca, Medina, and Jeddah and had for some considerable time been involved in wars with the Saudi tribe, which we have seen were part of the reason for the emigration of the Dahamshah or 'Utub' tribe to Qatar and then Kuwait. Whenever the Sherifs of Mecca were not concerned with the threats from the Yemeni Imams or the Mamluk Sultans of Cairo, they attempted to consolidate their power over Nejd.

The turning point in these long wars was 1744 (10), the year when the link between Muhammad Ibn Abd Al-Wahhab and Muhammad Ibn-Saud was formed. Muhammad Ibn Abd Al-Wahhab founded a form of Islamic puritanism. The extreme form of the Islamic puritanism that Muhammad

Ibn Abd Al-Wahhab preached suited the hard life of Nejd bedouin which compared miserably with the luxury of life in the towns of Jeddah or Basrah. The Saudi tribe through the person of Muhammad Ibn-Saud, quickly formed an alliance with the religious leader of this puritanical doctrine of 'tauhid', who gave his name to the western term 'Wahhabism'.

The Wahhabi movement began by fighting a long-drawn out war against the Bani-Khalid of Hasa and succeeded to unseat the leaders of the Bani-Khalid tribe. By the 1790's the Wahhabis were posing a serious threat to the Muntafiq tribes of Basra (under the suzerainty of the Pasha of Baghdad) and to Kuwait, the last outpost of the Bani-Khalid confederation. By 1797 Kuwait joined a Muntafiq-Turkish alliance against the Wahhabis, and by 1804 the Wahhabis had inflicted serious damage on the alliance and it looked as if they might become the victors of the war. This would have been the case if the emphasis of Wahhabi expansion had not then changed towards the Hejaz in Western Arabia, and if they had not encountered serious Mamluk opposition later on.

Securing the Sherifian strongholds in the Hejaz was a priority of the Wahhabis for religious reasons, and by 1800 Mecca and Medinah had opened their gates to the marauding Nejdi warriors of Saud Ibn Abd-EL-Aziz. By 1819 a counter-offensive by the Egyptian legions of the newly-appointed Sultan of Egypt, Muhammad Ali, had driven the Nejdis out of Mecca (1813) and raised their home-town of Al-Dariyya to the ground (1819). This defeat had saved Kuwait from invasion, while Kuwait's proximity to the Muntafiq tribes and the possibility of allying with them or the Turks had helped to keep Kuwait independent throughout the Wahhabi raids in the late eighteenth century.

Kuwait was, therefore, rid of its rulers (the Bani-Khalid) by 1800, due

to the Wahhabi invasions although it was rarely directly involved. The 'Ubug tribe of Kuwait prospered under their newly found independence, acknowledging throughout the nineteenth century only a loose suzerainty to the Pashliq of Baghdad. The Al-Sabah emerged as the rulers of Kuwait, elected by the tribe on traditional Muslim grounds of learning and ability to interpret the Holy Qur'an and administer Islamic justice. The second set of influences to have an important impact on the development of Kuwait was the migration of the Al-Khalifa family to Zubara in Qatar and their consequent invasion of Bahrain in 1782 (11). It appears that certain families of the 'Utub tribe were dissatisfied with their allocated share of the pearling industry of Kuwait and left to search for richer pearl beds. Records show (12) that the Al-Jalahima, or part of them, went with the Al-Khalifa to Zubara. In fact in Bahrain they discovered pearl beds even richer than those of Kuwait. Nevertheless, despite this split in the 'Utub tribe, strong links between the families remained (13) and Al-Sabah and Al-Khalifa families created a 'Utub alliance between Kuwait and Bahrain which allowed the 'Utub to be second only to the Muscatis in the Arab trade with India.

iii) THE DECLINE OF EAST INDIA COMPANY TRADE IN THE GULF

East India Company ("Company") trade between India and the Persian Gulf declined after 1773, at which time they represented the supreme European power in the area, and the main traders (14). East India Company imports of China tea into England increased while exports of opium to China, mainly from Bengal, brought large profits both to the Company and to private traders. In fact, the Company not only succeeded in increasing its Chinese imports and exports, but it also created a demand for British manufactures in China. In 1764 the Company exported to

TABLE 1:1

THE EXPORTS OF EAST INDIA COMPANY TO THE PERSIAN
GULF, INDIA AND CHINA OF WOOLLEN MANUFACTURED GOODS
1753-1778

(Number of Bales)

<u>Year</u>	<u>Persian Gulf</u>	<u>All India and China</u>
1753	600	2700
1754	800	2100
1755	890	2127
1756	1060	1234
1757	980	2536
1758	1130	2579
1759	1089	3657
1760	660	4438
1761	826	3368
1762	644	5965
1763	1805	5861
1764	1581	5653
1765	1581	4182
1766	1758	4513
1767	1308	4065
1768	681	5691
1769	127	5928
1770	26	5937
1771	655	4799
1772	200	5583
1773	-	-
1774	259	4177
1775	200	3257
1776	201	3563
1777	-	3843
1778	-	4040

Source : Abdul Amir Amin, British Interests in the Persian Gulf
(Leiden, The Netherlands, E.J. Brill, 1967), pp.151.

China 1,196 bales of woollen cloth, in 1771 the figure was 2,359 bales. This amounted to about half of all Company exports of this commodity. By comparison, bales sold to the Gulf dropped from an average of 1,000 bales in the 1750's to an average of 200 bales in the 1770's, and nothing at all by 1778. This drop in the sale of British woollen goods to the Persian Gulf was also due partly to increased exports of woollen goods by both England and France to the merchant community of Aleppo. A glance at Table 1:1, however, shows a rather erratic pattern in the decline of the sale of woollen goods by the East India Company in the Persian Gulf. Coin shortages, due to the unfavourable balance of trade of the Gulf with India were probably, therefore, the main reason for the unfavourable trading environment in the Gulf at the time. So serious was the problem of currency shortage that new contracts between the Basra merchants and the Company provided for only partial payment in cash. Until 1773, the Company employees at Basra received payment mostly in silk, Kirman wool, Venetian ware and pearls, despite their reluctance to accept bartering. Currency shortages were exacerbated by political instability in Iran, due to the Afghan invasions of this period, which led to hoarding of silver and to an even worse Persian balance of trade.

By 1773 the British had moved out of Bandar-Abbas and Abu Shahr and concentrated their activities in Basra, which had only been a minor outpost for the East India Company before then. Basra was more lucrative than the Persian littoral for traders, due to the Pashaliq of Baghdad's transit trade, and its low level of consumption compared to Persia. These factors meant that there was a higher level of liquidity and availability of currency in Basra than in Persia. The decision by the East India Company to move was, however, followed by a Persian invasion of Basrah in 1775 and consequently by a further move by the

East India Company to Kuwait. This was the first direct contact between Britain and the Kuwaitis. The East India Company had first transferred its desert mail route through Kuwait, and then, subsequently, its entire factory (or outpost).

Although by 1800 the British had moved back to Basra, and had also agreed with the Shah of Iran to service the Persian littoral, things were never quite the same thereafter as far as Kuwait was concerned. British involvement in trade dropped, and the Arab merchants (including the 'Utub) increased their share of the trade, while Kuwait became a permanent link in the East India Company's desert mail route to Aleppo. In the 1780's agreements between Basra and Kuwaiti merchants led also to much cargo destined for Basra, to be channelled to Aleppo via Kuwait, thereby saving substantial Ottoman taxes on cargo (15). The 1776 episode added transit trade to the pearl industry as one of the main activities of the Kuwaiti merchants.

iv) THE DEVELOPMENT OF KUWAIT FROM A TRIBAL SOCIETY TO A PRINCIPALITY

The end of Wahhabi incursions into North-East Hasa, and stable Turkish rule in the Pashaliq of Baghdad gave Kuwait a background of stability, within which to exploit the new advantageous position it had found for itself in the area's trade. Kuwait's link with Basra was close. It was part of the mercantile and financial system of Basra in later part of the nineteenth century. The relationships between Kuwaiti and Basra merchants in respect of transit trade, which grew to include slave-trading from Zanzibar, were strong. When Sheikh Mubarrak decided to back the British in the First World War and the period immediately preceeding it, against the Turks, whom the Muntafiq tribe of Basra were supporting, a full-scale rebellion of the merchants in Kuwait took place

which ended in their leader (one of the Al-Ghanim family) being imprisoned in 1911. Many of the others left for Basra in this period leading to a serious decline in commercial activity in Kuwait in the period 1911-1919 [16].

This action taken by Sheikh Mubarrak demonstrated the growing power of the ruler in the Kuwaiti community in the nineteenth century. Changes in the mode of production of the 'Utub tribe were supposed to have led to a growing stratification in Kuwaiti society, which still exists today [17]. Muhammad Rumaihi discussed the evolution of the political regime in Kuwait from a tribal society to a princely dictatorship [18]. The tribal structures which had existed in the early period after the tribes settled in Kuwait involved continuous consultation between the ruler and the various tribal sections. An economy which was still largely pastoral necessitated widespread consultation, because the main economic resource (sheep and goat herds) could not be brought under the direct control of the ruler. The increasing importance of the pearling industry after the 1780's involved effective power being concentrated more and more in the hands of the ruler. The ruler's ability to draw revenue from the pearling industry and, through his control over the industry, to affect the economic well-being of all those who worked in it ensured that wider consultation was not necessary. He could operate by forming shifting alliances with different merchants, never becoming dependent on any one. The dependence of the transit trade on low customs charges also required the good-will of the ruler. J.G. Lorimer [19] shows that the proportion of the workforce employed in pearling was far less in Bahrain and Kuwait than in other part of the Gulf (circa 20% as opposed to 40-50%) which points to the greater involvement of Bahrain and Kuwait in trade than other areas in the Gulf. If we take into account the 2,000-odd Persian workforce that used to migrate to Kuwait

for the pearling season, then clearly the Kuwait population were relatively more involved in the business of transit trade than Bahrain. After the agreements of 1899, the ruler's link with Britain further reinforced his position over the local trading community. No democratic movements were in evidence except during the merchant revolts of 1938/9 which were directly connected with the demise of the pearling industry, and during periods of external political threat (in particular in the period immediately after 1961).

Aside from changing the power of the ruler within local society, Rumaihi says the pearling industry also determined the overall social stratification which is in evidence until today (20). The distribution of gains from pearl-gathering was based on a long-established practice. This practice gave the main part of the gains to the merchants who financed the pearling trips and to the owners of the ships. Although the divers performed the most difficult work, their share in the product was minimal. The boat itself would be owned by the captain (nokhudah) or by a merchant. The merchants who owned the boats would also be the dealers for the pearls (tawwash). The nokhudah and tawwash were the dominant class of society and consisted of only very few. Divers were not paid wages, they were given a cut of the profits at the end of the season (tigsam) and pocket-money for the off-season period (salafiah) to be deducted from next year's tigsam. All of these cash advances were recorded against the diver's name in the nokhudah's logbook but it was only very rarely that a diver would earn enough to cancel his debt to the captain. When a diver did not earn sufficient to cancel these debts, the amount outstanding was carried forward to the following year and interest charged upon it. Until reforms were put through in the 1920's, if a diver died in debt, his sons and brothers would inherit the debt and would be forced to clear the debt by diving.

The nokhudas themselves were in debt to the tawwash, obtaining financing for the purchase of various provisions and supplies at the beginning of the season, on which they were charged interest. Although interest was contrary to Islamic Law, the merchants circumvented this by a system known as "mukalabah" (turnover) where the merchant sold to the nokhuda certain goods and provisions for a fixed sum and the goods would change hands again in the same transaction, at a substantial profit for the merchant. The captains or nokhudas were themselves almost enslaved by the merchants, just as they in turn enslaved their divers and pullers. On transit trade business, merchants would generally lease their ships to the nokhudas for substantial sums, rather than share profits as in the pearling industry, and would claim any damage or losses from the nokhuda who could thus be in debt for a large capital sum to the merchant. Often, however, the merchants did have their own cargoes on the ships. Thus in trade, in pearling and in agriculture, the worker was paid almost nothing and the large part of the economic surplus went to the merchants and the ruler.

v) THE FIRST WORLD WAR AND THE INTER-WAR DEPRESSION

The British had lost interest in the Gulf since the opening of the Suez Canal in 1869, and had diverted the India and China trade through Egypt. But Germany's increased attempts to break out of Britain's commercial grip on eastern trade (the so-called 'Drang Nach Osten') changed this attitude. The Deutsche Bank formed the Turkish Petroleum Company after the discovery of seepages of oil in Iraq and agreed with the Ottoman government to build a railway between Berlin and Baghdad. Britain felt increasingly threatened by the development of this 'alternative route to the East' by the Germans, and by their oil exploration programme in

Iraq. On 23rd January 1899, a treaty was signed with Sheikh Mubarak, who was seeking protection from a potential Turkish military threat.

The First World War, the tribal wars between 1920-1930 involving the re-establishment of the House of Saud in the Nejd, the border disputes between the Saudis, the Kuwaitis and the Iraqis, and the demise of the pearl industry in the 1920's due to the world depression and the development of cheaper Japanese cultured pearls, all spelled a bleak period for the Kuwaiti economy. Despite the victory of the British over the Germans and the Turks, the establishment of the Hashemite dynasty on the throne of Iraq, and the improved relations between Kuwait and Basra in 1919, after almost eight years of severance between the ruler of Kuwait and the Muntafiq tribes of Basra, trade did not improve. Clearly the main reason for this was the existence of the Suez-Canal which meant that most Indian and Chinese trade with Europe no longer came through the Gulf.

The fall in the price of silver relative to gold during the last quarter of the nineteenth century led to the depreciation of the Indian and Persian currencies which were on the silver standard [21]. Until the 1890's Kuwait used the silver rupee which had been adopted in 1806 by the East India Company. Prior to 1806, various different coins circulated, which were minted in various parts of India. The decline in the price of silver between 1870-1920 was due mainly to substantial discoveries of silver in the U.S.A. (the Comstock Lode and the Bonanza Mine, both in Nevada). The Austro-Hungarian Empire adopted a full gold standard in 1873 and started selling their old silver coinage (which consisted mainly of the Maria Theresa Thaler) which then became legal tender in the western and southern areas of the Arabian Peninsula. Other European countries also went on the Gold Standard and further

aggravated the situation (22). The silver rupee declined from Rs.1 = 2 shillings (1873) to Rs.1 = 1 shilling 3 pence (1893), where Rs. = Rupee(s). The Ottoman currency, which was on a bi-metallic standard based on the ratio initially established between gold and silver in 1844 of 1:15.09, was subject to substantial pressure when the Constantinople exchange based their foreign exchange rates on gold prices (23).

A no less important factor in the depreciation of the currencies in area was the debasement of the Turkish pound and the Persian kran by successive issues of coins of lighter weight or lower fineness due to the enormous deficits in the budgets of both governments (24). Similar developments in government finances which in England had led historically to the establishment of large internal capital markets (25), led in both Turkey and Persia to the establishment of foreign banking groups, chiefly British, although the Russians became involved in Persian banking for a brief period (26). The Imperial Ottoman Bank (27) was founded in 1863 in Constantinople and the Imperial Bank of Persia in 1889 in Teheran. Quite clearly one of the primary activities of each of these banks was to make advances to the respective local governments (28). In Kuwait and Basra in the period 1869-1873 the sarrafs were busy exchanging and trading between the complex coinage systems of the Ottoman Empire and Persia and the relatively simpler coins of India. The coins of India circulated as preferable currency due to their standardization since 1806 and the fact that they were not debased compared to the other coinage available. From April 1916 onwards the British forces in the Gulf, which were administered from India, brought Indian rupee notes and silver coins with them and these rapidly displaced Ottoman currency in the regions of occupation (29).

Prior to the establishment of the Imperial Ottoman Bank, the sarrafs were the only form of banking in the near-east outside India. The Imperial Ottoman Bank, the Eastern Bank and the Imperial Bank of Persia (and the branch of the Banca di Roma in Baghdad which closed down in 1940), even after they had been established, were not really concerned with internal financing, only the financing of the foreign trade sector in Turkey, Iran and Iraq (30). This is a point of importance which we bring up again in our discussion of currency-board economies in Chapter 3 and which is relevant to the argument that the money stock in a colonial economy, and in particular in pre-1946 Kuwait, was not independent of trade and the balance of payments. The lack of banking facilities for local merchants in the area of Basra led to the expansion of the business of the sarrafs (money changers) who accepted deposits, discounted bills, and gave short-term advances against property and bullion (31). Merchants in Basra and Kuwait also gave credit among themselves based on a system of "combialas" (promissory notes). Although these forms of credit were rudimentary and insignificant by comparison with the business of the branches of the foreign banks, they performed a useful function of money lending which the large foreign banks did not offer (32).

vi) THE GOLD EXCHANGE STANDARD IN INDIA

The "Gold Exchange Standard" established by the Indian government on the recommendation of the Fowler Committee in 1898 had strong implications for the trade of Kuwait and Basra, and in so far as Kuwait was concerned, came at a time (as we have seen above) when it was sorely needed to boost the economy of the Persian Gulf, although the beneficial effects of the Indian reforms, which we describe below, were clearly not intentional.

The declining price of silver during the latter half of the nineteenth century, and India's strong trade relations with Britain, which was on the Gold Standard, meant that India had increasing problems in finding enough silver currency to finance trade, and consequently the exchange rate of the Indian Rupee against sterling kept falling. Gold, although made acceptable in India in 1864 for the payment of government bills, was not available in enough supply to put India on a full Gold Standard. The idea of the Gold Exchange Standard was that gold would be made available for foreign remittances only, while rupee notes and silver coins circulated domestically and were not convertible into gold. This allowed India to benefit from a stable exchange rate with other gold standard countries without having to maintain a large gold reserve to back the domestic convertibility of its currency.

The fact that the foreign reserve was transferred to London and that the Indian balance of payments was mostly in surplus until 1907-8, and the fact also that the bill of exchange on London banks became its main method of international payments [33], meant that India was in effect on a sterling exchange standard. The suspension of convertibility by Britain in 1931 and the adoption by India of the full sterling exchange standard did not, therefore, change anything.

Since 1873, the normal activities of the Basra and Kuwait merchants in the field of specie and bullion trade had livened up with increasing demand for gold coming from India. By the time the Gold Exchange Standard was working, a substantial premium was being paid by Indians for gold which they couldn't obtain through the open market [34]. The Indian government continued to mint silver coins for normal internal trade, and silver was purchased in London with the country's surplus in

the balance of trade to be shipped to India for minting. In 1862 the government had taken over the note issue from the presiding banks and paper rupees were circulating alongside silver coins, but due to the conservative note issue cover and the declining price of silver, more and more coins had to be minted in the face of expanding internal demand.

The fact that gold was being demanded at a premium and that the rupee was freely convertible into sterling at a fixed rate of exchange created a profitable arbitrage opportunity for Gulf merchants in Kuwait and Basra who smuggled gold into India and Pakistan against Indian rupees which were converted into sterling and used for gold purchases. There began another trading cycle. The bullion trade replaced pearling as Kuwait's main activity after the demise of pearling in the 1920's. Between 1920 and 1947, the gold trade in fact could go either way since the price of silver had stabilized and in some periods had strengthened considerably. After 1947, however, the premium on gold was re-established and led to large conversions of rupees for sterling which by 1957 and 1958 created a balance of payments crisis for the Reserve Bank of India. On May 11, 1959, India issued a currency specifically for use in the Gulf - the Gulf Rupee (at par with the Indian Rupee Rs13.3 = STG.1 = 0.186621 grams of gold) was blue instead of the usual green and was an obligation of the Bombay branch of the Reserve Bank alone. However, almost a year later Kuwait issued its own currency (35).

vii) THE DISCOVERY OF OIL

Although the Standard Oil of California had started exploiting finds in Saudi-Arabia during the Second World War, and although the Kuwait Oil

Company (a joint venture between the Anglo-Iranian Oil Company and Gulf Oil) had struck oil in the Burgan in 1938, no oil exports were made from Kuwait until 1946. The Second World War saw a revival in commercial activity in Kuwait and Basra based on the smuggling of essential goods in wartime and on military expenditure by the British forces in the area. There was no damaging military activity in the area, although much anti-British feeling developed and exploded in sporadic riots from time to time in the Gulf States.

The Imperial Bank of Iran (formerly the Imperial Bank of Persia) was the first bank to open a branch and operate in Kuwait (1942). The Eastern Bank with branches in Basra and Bahrain was the only other bank operating in the Persian Gulf ports before 1942. In 1948 the Imperial Bank of Iran became the British Bank of the Middle East (BBME). The bank was managed in London and was the banker to the Kuwait government. Since the bank had begun by operating in Basra, it is presumed the Kuwait government had developed close relations with this branch, because when the bank subsequently opened in Kuwait, it quickly obtained exclusivity of business with the government (at least for foreign banks). Gulf Oil and Anglo-Iranian (later BP) each paid their contributions to the government for their oil production into the BBME London, and until the Finance Department of Kuwait was created in 1959, these sums were banked directly in the ruler's name (36). These payments were made quarterly, and, apart from the few local taxes raised, made up almost all the State budget. The ruler normally budgeted a surplus and transferred this to a reserve account managed in London by the Kuwait Investment Board set up in 1953, and consisting of five London bankers whose names were kept secret. The secrecy in the management of the country's funds was later to become a bone of contention between the ruler and the newly-elected assembly of deputies

(1962).

The 1943 company meeting of the Imperial Bank of India gave the first public statement by any bank on Kuwait:

"Our office in Kuwait has justified its establishment. This point is a valuable emporium for trade with the hinterland of N.E. Arabia, mainly in goods imported from India" (37)

There is as yet no mention of oil or pearling which as we explained had suffered a relapse, merely of the centuries-old trade with India which had for so long kept Kuwait on the Rupee or Sterling Standard. The 1947 meeting has a different tone:

"Our branches at Kuwait and Bahrain and Dubai in the Persian Gulf are performing a useful function in trade with Iraq, India, Iran and Saudi Arabia. The oil developments at Kuwait give assurance of increasing activity at that prosperous port" (38)

By comparison very little is said about Bahrain and Dubai at all, and by 1950 the company meeting of the Eastern Bank mentions something to the effect that their new branch in Bahrain was regarded in wonder by the locals as they had never seen something like it before. A sharp contrast with the situation in Kuwait, which benefited from more active trading and proximity to Basra.

By 1952 the growth in the oil economy had given the Kuwaiti merchants enough reason for them to found a bank of their own, the National Bank

of Kuwait. The fastest increases in oil production made by the oil companies were made between 1946 and 1952, oil production more than doubling in some years. The merchants were quick to vie for monopoly of the ancillary services and industries connected with oil, and the government's construction programmes increased as a result of its newly-found economic surplus. The National Bank of Kuwait was founded [39] more or less in the same spirit, just as some merchants [40] converted apartment blocks with urgency into what was to become the Kuwait Sheraton Hotel. They were all measures undertaken by the merchant community to gain from the economy's potential growth. No statistics of any value are available to demonstrate the economy's growth over this period. Statistics only officially started in 1960 and it was only until 1973 that reasonably accurate figures began to be recorded in the various sectors of the economy. Some writers [41] have estimated the oil revenues of the first years giving us an idea of the growth of the economy in the period 1940-1953:

<u>Year</u>	<u>Government Oil Revenues</u>	
	<u>US\$m</u>	<u>% increase</u>
1946	0.76	-
1947	2.07	172.3
1948	5.95	187.4
1949	11.52	93.6
1950	16.09	39.6
1951	18.00	11.8
1952	57.00	216.6
1953	169.00	195.6

Thereafter increases stayed at between 2.4% and 22.8% with the exception of 1955 (45%), 1972 (71.3%) and 1974 (295.2%). The rapid increases in 1952 and 1953 were directly due to the nationalization of Iran's oil industry by Mossadeq, which reduced Iran's output considerably. Iran's output had been until then the highest in the world.

viii) THE LAND ACQUISITION PROGRAMME

The participation of the private sector in the Kuwaiti economy was among the highest in the Arab world in percentage terms by 1970, and this was as a result of a policy of transfer of wealth to the merchant community from the ruler. No direct transfers to the private sector in Kuwait took place before the early 1950's [42]. But there is plenty of evidence that by the mid-fifties a policy of land purchases was well underway [43], creating substantial land speculation among Kuwaitis.

"The Mission recognised that the level of business activity in Kuwait, under present circumstances, largely depends on the flow of public funds to the private sector. Therefore its recommendations contemplated that the level of total expenditure in the Kuwait economy during the next five years should be maintained at above the 1960/61 level. However, it suggested that the purchase of land by the Government should be reduced to about 30% of the 1960/61 level by 1963/64". [44]

The 1961 World Bank Mission recommendation to reduce the levels of land acquisition was ignored as we can see in the statistics on land purchases by the government in Table 1.2.

"Although the Government has, partly by force of circumstances (including the crisis with Iraq), followed a different course (increasing current expenditures and land purchases), the expenditure pattern suggested by the 1961 Mission still appears

TABLE 1:2

EXPENDITURES BY THE KUWAIT GOVERNMENT ON LAND PURCHASES
AS A PERCENTAGE OF TOTAL GOVERNMENT EXPENDITURE

1957	24.66
1958	34.48
1959	41.17
1960/61	31.85
1961/62	36.41
1962/63	28.42
1963/64	21.16
1964/65	22.30
1965/66	13.10
1966/67	4.10
1967/68	19.10
1968/69	6.40
1969/70	3.30
1970/71	7.90
1971/72	5.70
1972/73	6.00
1973/74	4.60
1974/75	12.40
1975/76	7.70
1976/77	4.70

Source : Annual Abstract of Statistics,
Ministry of Planning (1978)

sound". (45)

The implication of this statement is that the claim on Kuwaiti territory made by Iraq's new revolutionary government in 1961 put pressure on the ruler of Kuwait to be more democratic. Certainly the creation of the National Assembly was a direct result of this threat, however it is not clear why the ruler started the land purchase programme in the early fifties. If we follow the logic of Al-Rumaihi's arguments (46) the oil industry as a new mode of production should have centralized power even more than pearling.

An explanation which seems plausible has been given by Al-Nafisi (47) and that is that the very rapid development in the 1950's encouraged by rising oil revenues, meant that the ruler had to depend on the merchant classes for the administration of the country as they were the only educated people in Kuwait. No other elements of a more plebeian nature with sufficient education existed that could have been brought in to reinforce the ruler's position vis-a-vis the merchant classes. Some writers add the fact that Sheikh Abdulla had an easy-going character (48). Those reasons given, plus the political pressure on the ruler to rally the merchant classes behind him in the face of external threats, led to the policy of transfers to the private sector which began with the land acquisition programme.

All three of the World Bank missions (1961, 1963 and 1965) discouraged land purchases by the government. The main reason given for this approach was inequity:-

"Whatever the political or developmental justifications for this practice, the prices fixed

TABLE 1:3

ANALYSIS OF GOVERNMENT LAND PURCHASES BY SIZE OF TRANSACTION
AND DISTRIBUTION ACROSS THE POPULATION
1971-77

Thousands of Kuwaiti Dinars	Number of Individuals (a)	Aggregate Payment (Thousands of Kuwaiti Dinars)	Payment In Each Category As A Percentage Of The Total	Individuals In Each Category As A % Of Total (c)
Below 10	2586	13691	3.09	19.08
10-20	3800	53124	12.01	28.02
20-30	2793	68510	15.49	20.59
30-40	1665	57288	12.96	12.28
40-50	822	41245	9.35	6.06
50-60	563	30850	6.98	4.15
60-70	334	21568	4.88	2.46
70-80	211	15590	3.53	1.56
80-90	144	12053	2.73	1.06
90-100	113	15581	2.39	0.83
100-200	281	52440	11.86	2.81
200-300	78	18893	4.27	0.58
300-400	27	9571	2.16	0.20
400-500	14	6299	1.42	0.10
Above 500	33	20407	6.88	0.24
	<u>13564 (b)</u>	<u>442209</u>	<u>100.00</u>	<u>100.00</u>

Source : Jassim Al-Saadoun "Factors Affecting the Distribution of Income in Kuwait", Journal of Gulf and Arab Peninsular Studies 1977 (in arabic), pp. 60-93.

- (a) This does not take into account sales of land made by landowners through relations or friends.
- (b) N.B. Total number of individuals very small.
- (c) Rows 1-4, the percentage individuals are lower than the percentage payments and after Row 4 this is reversed.

by the government for these transactions and the small amount thus far collected on the resale of the land make the public land transactions rather an inequitable way of distributing the oil revenues".

[49]

The inequitability of land purchase transactions for the period 1971-77 can be seen in Table 1.3 although no such figures are available for the early period. It would seem that since the mechanics of the Land Acquisition Department in the Kuwait Municipality was handled by some of the leading merchant names, it would seem a sure way for the merchant classes to acquire wealth. The stratification thesis of Al-Rumaihi (50) based on the social implications of the pearling industry in the nineteenth and early twentieth centuries is lent support by these findings (51). In Table 1.4 we find further evidence to support the argument that after 1961 Kuwait's political system became oligarchic. A glance at the directorships of certain families such as Al-Ateeqi, Al-Bahar, Behbehani, Al-Dabbous, Al-Duaij, Al-Fulaij, Al-Gharabally, Al-Ghuneim, Al-Hamad, Al-Homaidhi, Al-Issa, Al-Kazemi, Al-Khorafi, Al-Ma'arefi, Al-Marzouq, Al-Mutawa, Al-Nafisi, Al-Nusf, Al-Qatami, Al-Rashid, Al-Rifai, Al-Roumi, Al-Saleh, Al-Sane', Al-Saqr, Al-Sayer, Al-Shaye', Al-Sultan, Al-Wazzan shows a clear concentration of power. Many of the names in Table 1.4 which don't belong to this list of the large and wealthy families, tend to appear on the boards of companies with a government stake, and would almost invariably represent the government as a civil servant.

ix) THE CREATION OF THE STOCK MARKET

The main reason for the World Bank mission's opposition to the

government's land acquisition programme was that such a policy on its own encouraged capital outflows without leading to the creation of any indigenous industry:-

"... probably the largest share of these funds are invested abroad, so that the land purchase programme fails to accomplish its main objective of invigorating the Kuwait economy". (52)

These recommendations perhaps did lead the government to reduce the overall importance of land purchases gradually, which trend we can detect in Table 1:2 (although in absolute figures the drop really was never very much). They possibly also led the government to give more importance to and to begin actively encouraging, the Kuwait stock market which by 1960 already included nine shareholding companies. The purpose of such encouragement would be to use the stock market as a mechanism for the transfer of wealth to the private sector either alone or beside the land acquisition programme. The Kuwait stock market would be a more effective tool in promoting local enterprise and industry and would help prevent and perhaps reverse the outflow of private wealth. It was probably encouraged by the World Bank although there is no written evidence of this.

By 1973 the Ministry of Commerce actually began to collect and organise data on the stock market (such data as stock price movements and daily volume, for each share) whereas before then the market had been completely informal. By this time the broking community had opened offices in close proximity to one another in one area of Kuwait city and the Ministry of Commerce eventually allocated a specific area as a trading floor for brokers (in April 1977). This however did not prevent

the merchant community from trading between themselves without using brokers, as we shall see in Chapter 4. The Ministry of Commerce, nevertheless, was able to keep reasonably accurate data based on the registration of share certificates with company registrars subsequent to a trade. A great deal of trading did take place on the basis of temporary notes of title issued by company registrars, however, pending the issue of formal share certificates. Completely accurate data was therefore difficult to obtain. Apart from this recording function the Ministry of Commerce imposed few regulations, and, as we shall see in Chapter 4, those that it did impose were circumvented.

The stock market was a successful mechanism for the redistribution of wealth. This can be inferred from the results of a recent study which concludes that the Kuwait stock market is inefficient:-

"The results indicate that share prices tend to move systematically overtime. This would enable investors to consistently "beat the market". Consequently, there is evidence of inefficiency in price determination on the Kuwaiti Stock Market, as might be expected in a relatively thin market". (53)

The study by Gandhi, Saunders and Woodward argues that the more systematic the movement in share prices over time, the more imperfect and thin the stock market (54). The reason for this is that systematic movements in price implies that the dissemination of information to investors is imperfect and opportunities exist for monopoly profits to be made by certain traders. If, by contrast, information was fully disseminated and the market was "efficient", stock prices should follow a random walk over time. The movement of series over time can be

considered random if:-

$$v_t = p_t - p_{t-1} \quad t = 1, \dots, n$$

where p_t is the stock price at time t and p_{t-1} the stock price in the previous time period and where p_t and p_{t-1} have zero correlation when we restate the equation as:-

$$p_t = p_{t-1} + v_t$$

The results of the study showed that the amount of serial correlation in the Kuwait stock market was extremely high. By comparison with these results, the vast majority of U.K. and U.S. random walk tests have failed to pick up any significant serial correlation in share prices in those markets.

The importance of the activities of the private sector and the characteristics of the Kuwait stock market have important implications for monetary developments in Kuwait in the period under study as we shall see in Chapters 3 and 4.

TABLE 1:4

DIRECTORY OF DIRECTORSHIPS OF THE KUWAIT PUBLIC SHAREHOLDING COMPANIES AT 31.12.78

Abdul Jadr, Mohammed Issa	Oil Tankers (Deputy Chairman)
Abdul Rahim, Abdul Hamid Hussein	Kuwait Foods
Al Abdul Rasoul, Abdul Hamid Hussein	Kuwait Cement
Al Abdul Razzaq, Badr Sa'oud	National Automotive
Al Abdul Razzaq, Sa'oud Abdul Aziz	Al Ahli Bank (Chairman)
Al Abdul Razzaq, Youssuf Abdul Aziz	Warbah Insurance
Al Abdul Wahab, Badr Salim	Oil Tankers
Al Abidan, Abdulla Abdul Aziz	Kuwait Cement
Al Abidi, Dr. Mubarak	Petrochemicals
Al Adassani, Mahmoud Khalid	Metal Pipes
Al Ahmed, Sheikh Mubarak Jabr	Land Transport
Al Ahmed, Sheikh Naser Sabah	United Real Estate (Chairman), United Fisheries
Ali, Mahameed Suleiman Sayid	National Bank
Ahmed, Ali Abdul Aziz Ali	Kuwait Poultry
Al Amir, Jassim Ahmed	Warbah Insurance
Al Aradi, Abdul Aziz Darwish	Food Agriculture
Al Asfour, Abdul Latif Abdulla	United Fisheries (Chairman), Kuwait Food and Agricultural Products
Al Asfour, Abdul Mohsin Ahmed	Kuwait Tyres
Al Askar, Abdul Razzak Abdul Aziz	National Real Estate
Al Ateeqi, Anour Abdul Rehman	Kuwait Tyres (Deputy Chairman)
Al Ateeqi, Abdulla Salim	National Automotive (Chairman)
Al Ateeqi, Hamed Abdulla	Melamine Industries (Chairman)
Al Ateeqi, Khalid Saleh	National Real Estate (Deputy Chairman), Melamine Industries Financial House
Al Ateeqi, Mohammed Abdul Mohsin	Burgan Bank
Al Ateeqi, Mohammed Hamed	National Industries (Chairman) National Automotive, IBK
Al Attar, Mohammed Hassan	Shipbuilding, United Fisheries (Government Director)
Al Awadhi, Abdul Aziz Abdulla	Kuwait Poultry
Al Awadhi, Mohammed Darwish	KIIC, National Automotive
Al Ayoub, Abdulla Ahmed	Kuwait Tyres
Al Ayoub, Saleh Ahmed	Burgan Bank

Al Badr, Ali Sa'adoun	Flour Mills
Al Badr, Ghezi Khalid	United Fisheries
Al Baghali, Jassim Mohammed	Kuwait Tyres
Al Bahar, Ali Abdul Rahman	Gulf Bank, Flour Mills (Deputy Chairman)
Al Bahar, Abdul Aziz Ahmed	
Al Bahar, Abdul Latif Ahmed	Kuwait Transport
Al Bahar, Fahd Abdul Rahman	BKME (Chairman)
Al Bahar, Fou'ad Abdul Rahman	KIC
Al Bahar, Mohammed Abdul Rahman	National Bank
Al Bahar, Hamed Ahmed	Kuwait Insurance (Chairman), Metal Pipes
Al Bahar, Jassim Mohammed Abdul Rahman	KIIC, Commercial Bank
Al Bahar, Mashari Abdul Rahman	Refrigeration (Chairman)
Al Bahar, Marzouq, Ali Abdul Rahman	Melamine Industries
Bahman, Abdul Hussein	Flour Mills
Bahman, Issa Abdulla	Kuwait Tyres
Al Banawan, Mohammed Mubarak	Refrigeration
Al Barak, Tariq Mohammed	Kuwait Poultry
Al Basiri, Abdul Aziz Abdul Latif	Kuwait Oil Company (Deputy Managing Director)
Behbehani, Amir	Petrochemicals
Behbehani, Abdul Jalil Sayid Hassan	United Real Estate, Kuwait Livestock, United Fisheries
Behbehani, Ali Morad	Kuwait Cinemas
Behbehani, Ahmed Youssuf	KIIC, Kuwait Hotels
Behbehani, Mohameed Saleh	Kuwait Hotels, Kuwait Insurance
Behbehani, Morad Youssuf	Metal Pipes, Al Ahli Bank
Behbehani, Yacoub Youssuf	Al Ahli Bank
Bisharra, Sa'oud Aziz	United Fisheries
Bu Abbas, Fadhil Mohammed	Food and Agricultural Products
Budai, Mustafa Jassim	Kuwait Insurance (Deputy Chairman), National Bank
Budai, Jassim Marzouq	Commercial Bank
Al Dabous, Fahd Na'if	Metal Pipes (Deputy Chairman)
Al Dabous, Feisal Sa'oud	Burgan Bank
Al Dabous, Suleiman Abdulla	Burgan Bank (Deputy Chairman)
Al Da'oud, Badr Ali	KIC (Chairman)
Al Derbas, Sa'oud Mustafa	Gulf Cables
Al Du'a'ij, Ahmed Ali	United Real Estate

Al Du'aij, Abdul Latif Abdulla	Burgan Bank
Al Du'aij, Abdul Malik Rashid	Sanitary Ware (General Manager)
Al Du'aij, Abdul Rahman Abdulla	Kuwait Transport
Al Du'aij, Youssuf Ahmed	National Real Estate (Managing Director)
Al Faraj, Mohammed Ibrahim	Kuwait Poultry
Al Fahd, Abdul Wahab Ahmed	BKME
Al Fahd, Ahmed Fahad	Gulf Insurance
Al Faris, Ibrahim Abdul Aziz	Gulf Cables
Al Fawzan, Ali Abdul Karim	Financial House
Al Fawzan, Sa'oud Abdul Aziz	Gulf Cable
Al Fulaij, Abdul Aziz Sa'oud	Gulf Insurance Flour Mills, Gulf Bank
Al Fulaij, Feisal Sa'oud	Sanitary Ware (Chairman), Kuwait Real Estate
Al Fulaij, Khalid al Fulaij al Ali	Metal Pipes, National Industries, Gulf Bank
Al Fulaij, Youssuf Abdul Aziz	Oil Tankers, National Bank
Al Ghanim, Fou'ad Mohammed Thunayan	Oil Tankers
Al Ghanim, Youssuf Ibrahim	Al Ahleia Insurance (Deputy Chairman)
Al Gharabally, Abdul Malik Sayid	Kuwait Oil Company, (Deputy Managing Director)
Al Gharabally, Abdul Majid Sayid Ahmed	BKME
Al Gharabally, Jassim Mohammed	National Automotive (Managing Director)
Al Gharabally, Musa'ed Ahmed	Kuwait Tyres
Al Ghuneim, Abdul Ghani Khalid	Warbah Insurance (Deputy Chairman)
Al Ghuneim, Abdul Aziz Khalid	Kuwait Insurance, Commercial Bank
Al Ghuneim, Marzouq Khalid	Kuwait Cinemas
Al Ghuneim, Sabah Khalid	Warbah Insurance
Al Ghuneim, Suleiman Khalid	Kuwait Cement (Deputy Chairman)
Al Hadeed, Fahd Abdul Aziz	Burgan Bank
Al Haji, Hadi Hleef	Kuwait Tyres
Hamad Abdul Aziz	Commercial Bank (Chairman)
Al Hamd, Khalid Abdul Latif	National Bank
Al Hamd, Musa'ed Youssuf	National Real Estate, Kuwait Cement
Al Hamad, Suleiman Khalid	Kuwait Insurance, IBK
Al Hamd, Yacoub Youssuf	National Bank (Chairman), Kuwait Cinemas
Al Hamadhen, Mohammed Nasr	National Real Estate (Chairman)

Al Hamoud, Saleh Ahmed	Kuwait Oil Company
Al Havar, Ali Abdullah	Shipbuilding
Al Haroun, Abdul Wahab Rashid	Kuwait Transport (Deputy Chairman)
Al Hashash, Mohammed Issa	Shipbuilding
Hassan, Abdul Rasoul Youssuf Abu	Burgan Bank (Chairman and Managing Director)
Al Hassayan, Hazz' Jassim	National Real Estate
Al Hawadh, Abdul Rahman Ibrahim	Kuwait Cinemas
Bu Hindi, Mohammed Ibrahim	Financial House (Deputy Chairman)
Al Homaidhi, Khalid Ahmed	Flour Mills
Al Homaidhi, Saide Hamad al Saleh	Commercial Bank
Al Homaidhi, Yacoub Youssuf	Livestock (Chairman), Al Ahleia Insurance
Al Howeila, Hadi Halif	Financial House
Al Hudaf, Abdul Latif	Petrochemicals (Deputy and General Manager)
Hussein, Abdul Aziz Malil	Kuwait Oil Company (Deputy Chairman)
Al Hussein, Abdul Mohsein Youssuf	KFTCIC
Hussein, Abdul Hamid	National Industries
Hussein, Nazear Malil	United Fisheries (Government Director)
Al Hassawi, Yassin	Kuwait Hotels
Al Ibrahim, Mohammed Hamad Hassan	Livestock
Al Issa, Abdulla Sultan	Land Transport
Al Issa, Badr al Sheikh Youssuf	KIC (Deputy Chairman)
Al Issa, Khalid Hussein	National Industries
Al Issa, Mustafa Sultan	Gulf Bank
Ja'affer Feisal Khalid	National Real Estate, KFTCIC (Government Director)
Al Jabr, Ali Ahmed al Ghanim	United Fisheries (Deputy Chairman), Kuwait Shipbuilding
Al Jallal, Feisal Abdul Aziz	National Automotive, Kuwait Poultry
Al Jallal, Youssuf Abdulla	Melamine Industries
Jama'al, Ali Youssuf	National Real Estate
Al Jarallah, Abdulla Hassan	Warbeh Insurance (Chairman)
Al Jasar, Abdulla, Wakhil	Land Transport (Deputy Chairman)
Al Jassim, Hussein	Petrochemicals (Deputy Chairman and General Manager)
Al Jou'an, Yacoub Youssuf	Refrigeration (Deputy Chairman), Kuwait Foods, Gulf Bank
Al Jouma, Hussein, Makki	Al Ahli Bank (Managing Director)

Al Kazemi, Dr. Feisal	KFTCIC (Deputy Managing Director)
Al Kazemi, Mohammed Amin	Melamine Industries (Deputy Chairman)
Al Kazemi, Shaker Abdul Majid	BKME
Al Kazemi, Usama Zaid	KIIC (Chairman), BKME, Land Transport
Khan, Dr. Abbas Abdul Latif Ali	Oil Tankers
Al Khalid Feisal Abdul Razzak al Hemad	Kuwait Cinemas
Al Khalid Feisal Hamouf Zid	Gulf Cables
Al Khalid, Meshari Khalid Zaid	Kuwait Poultry (Chairman)
Al Khatrash, Abdul Razzak Abdul Mohsin	Food and Agricultural Products
Al Khatrash, Feisal Abdul Mohsin	KFTCIC (Deputy Managing Director)
Al Khorafi, Abdulla Badr	Kuwait Cement
Al Khorafi, Fawzi Mohammed Abdul Mohsin	Al Ahleia Insurance
Al Khorafi, Khalid Ali	Kuwait Hotels (Chairman), Flour Mills
Al Khorafi, Mohammed Abdul Mohsin	National Bank, Gulf Cables (Chairman), Oil Tankers
Al Khorafi, Nasr. Mohammed Abdul Mohsin	Kuwait Foods (Chairman), Livestock (Deputy Chairman), KIC
Al Khorafi, Yacoub Youssuf	Melamine Industries
Al Ma'arifi, Abdul Samid Abdulla	Al Ahli Bank
Al Ma'arifi, Fawzi Ja'effar	Melamine Industries
Al Ma'arifi, Mohammed Ibrahim	Kuwait Hotels
Al Ma'arifi, Maher Abdulla	Shipbuilding
Mahmoud Mohammed Mahmoud	United Arab Shipping
Al Manaif, Abdulla Sa'ad	Oil Tankers
Al Mashari, Ahmed Hamed	Sanitary Ware
Al Mashari, Khalid Abdulla Mohammed	Kuwait Cement
Al Massam, Zaid Suleiman Ibrahim	Kuwait Foods
Al Matrouk, Fou'ad Abdul Mohsin	Kuwaiti Hotels (Chairman)
Al Mazhad, Abdul Rahman, Abdul Aziz	Kuwait Foods (Deputy Chairman)
Al Mazidi, Issa Mohammed	Food Agricultural Products
Al Marzouq, Ahmed Abdul Wahab	Sanitary Ware (Deputy Chairman)
Al Marzouq, Barrak Khalid	Kuwait Transport
Al Marzouq, Feisal Youssuf	Shipbuilding (Chairman), Commercial Bank (Deputy Chairman)
Al Marzouq, Jasim Youssuf	National Automotive
Al Marzouq, Khalid Youssuf	Real Estate Bank (Deputy Chairman), Kuwait Real Estate (Chairman)

Al Marzouq, Musa'ed Ahmed
 Al Marzouq, Saleh, Fahd
 Abdul Rahman Abdul Mughni Mohammed
 Al Mousa, Ali Mousa Mohammed
 Al Mousa, Badr, Abdul Mohsein
 Al Motawa, Abdul Aziz Abdul Latif
 Al Motawa, Feisal Abdul Wahab
 Al Motawa, Khalid Youssuf
 Mubarak, Mubarak Sultan
 Al Madhafi Ali Mohammed
 Al Muhri, Jassim Othman
 Al Muhri, Abdul Latif Abdulla
 Al Mashari, Rashed Abdulla
 Mughni, Abdul Rahman
 Al Mujrin, Youssuf Abdulla
 Al Mufarij, Mufarij Ibrahim
 Al Mulla Abdul Aziz Abdul Rahman
 Al Mulla Najib Abdulla
 Mustafa, Ahmed Hamza
 Al Muta'ir, Ahmed Abdul Mohsin
 Al Muta'ir, Barak Abdul Mohsin
 Al Muzaini, Abdulla Abdul Aziz
 Al Muzaini, Youssuf Abdul Aziz
 Al Muae'l, Feisal

 Al Nafisi, Ghazi Fahd
 Al Nafisi, Yacoub Youssuf
 Al Naguib, Tariq Youssuf
 Al Nahad, Sa'ad Ali
 Al Nagib, Ahmed Abdul Wahab
 Al Nashemim Sa'oud Jassim
 Al Nasrullah, Ahmed Youssuf
 Al Nassar, Nassar Abdulla
 Al Nouri, Sa'oud Abdul Khaliq
 Al Nusf, Abdul Haqi Abdulla

Kuwait Cement
 KIIC (Deputy Chairman)
 Kuwait Estate, Real Estate Bank
 KIC
 Flour Mills
 Metal Pipes
 Land Transport (Chairman)
 Gulf Bank (Chairman)
 Kuwait Tyres
 Financial House
 Burgen Bank
 Gulf Bank
 Kuwait Hotels
 Kuwait Insurance
 Kuwait Transport
 Kuwait Cement
 Kuwait Hotels
 Food Agricultural Products (Deputy Chairman)
 United Fisheries
 Kuwait Oil Company (Chairman)
 Kuwait Estate, Commercial Bank
 National Real Estate, Gulf Insurance
 Kuwait Cinemas, Al Ahleia Insurance, KFTCIC
 Kuwait Hotels

 Kuwait Oil Company, Sanitary Ware
 Commercial Bank
 Oil Tankers
 Real Estate Bank (Chairman)
 Real Estate Bank
 Oil Tankers
 Kuwait Cement
 United Fisheries
 Refrigeration
 Petrochemicals (Chairman)

Al Nuf, Feisal Abdul Latif	United Fisheries
Al Nuf, Mohammed Youssuf	Al Ahleia Insurance (Chairman), Kuwait Estate
Al Nuf, Salim Mohammed Youssuf	Melamine Industries
Al Nuf Walid Abdul Latif	Kuwait Cinemas (Chairman) National Bank, IBK
Al Obeid, Abdul Hamid Abdul Razzak	Financial House
Al Omar, Abdul Razzak Sultan	Kuwait Real Estate (Deputy Chairman), Real Estate Bank
Al Omar, Ali Abdul Rahman	Livestock
Al Omar, Sa'oud Abdul Aziz	BKME
Al Omar, Saleh Mohammed	Gulf Insurance (Deputy Chairman)
Al Otaibi, Ali Mohammed	BKME (Deputy Chairman)
Al Otaibi, Hisham	Kuwait Hotels
Al Othman, Adel Abdulla	Kuwait Transport
Al Othman, Youssuf Saleh	IBK
Qabazard, Mohammed Hussein	National Automotive (Deputy Chairman)
Qabazar, Hassan Ali	Warbah Insurance
Al Qabandi, Badr	National Industries
Al Qatami Feisal Youssuf	Land Transport (Deputy Managing Director)
Al Qatami, Nasr Abdul Wahad	Flour Mills (Deputy Chairman), Gulf Bank
Al Qu'oud Abdul Rahman, Mubarak	Food and Agricultural Products, KFTCIC (Government Director)
Al Rabieh, Ibrahim Abdul Aziz	Metal Pipes
Al Ramieh, Mohammed Ibrahim	Sanitary Ware
Al Rashid Abdul Aziz Abdul Mohsin	Kuwait Estates
Al Rashid, Abdulla al Dakhil	Refrigeration
Al Rashid, Abdul Mohsin Abdul Aziz	Kuwait Cement
Al Rashid Moyyid Abdul Aziz	IBK
Al Rashid, Rashid Aziz	Kuwait Cement (Chairman)
Al Rashid, Sa'ad Abdul Aziz	Shipbuilding
Al Rashid, Saleh Masah	KFTCIC (Government Director)
Al Rifai, Abdulla al Sayid Abdul Mohsin	Al Ahleia Insurance (Managing Director)
Al Rifai, Abdulla Al Sayid Rajab	Gulf Cables
Al Rifai, Badr Al Sayid Abdul Wahab	Kuwait Cinemas
Al Rifai, Hisham al Sayid Abdul Rahman	Land Transport (Deputy Managing Director)
Al Rifai, Jamal al Sayid Hashim	Petrochemicals

Rifai, Sa'ad Sayid Yacoub	National Industries, KIIC
Al Roumi, Hamed Abdulla	Kuwait Transport
Al Roumi, Khalifa Youssuf	Al Ahli Bank (Deputy Chairman), KIIC
Al Roumi, Mohammed Youssuf	Financial House
Al Roumi, Suleiman Youssuf	Gulf Cables
Al Roumi, Khalid Abdulla	Kuwait Transport
Al Sa'ad, Abdulla Mohammed	Kuwait Hotels
Al Sa'ad, Sa'ad Mohammed	National Industries (Deputy Chairman), National Bank
Al Sa'adoun, Jassim Khalid	IBK
Sa'adiq, Jassim Abdul Aziz	Kuwait Tyres
Al Sabah, Ali Jarah	Burgen Bank (Deputy Chairman)
Al Sabah, Sheikh Mubarak Sabah al Nasr	Food and Agricultural Products (Chairman)
Salameh, Jassim Mohammed	Gulf Insurance
Sahli Suleiman Khalid	National Real Estate, United Fisheries
Al Saleh, Abdulla Issa	Metal Pipes (Managing Director)
Al Saleh, Abdul Aziz al Hamad	Al Ahleia Insurance, Gulf Bank
Al Saleh, Abdull Mubarak	National Automotive
Al Saleh, Da'oud Musa'ed	Gulf Bank
Al Saleh, Najeeb Hamed Musa'ed	Kuwait Transport
Al Saleh, Fawzi, Musa'ed	Metal Pipes (Chairman), United Real Estate (Deputy Chairman)
Al Sane' Abdul Latif Abdul Hamid	Kuwait Estates
Al Sane, Abdul Razzak Abdul Hamid	Real Estate Bank
Al Sane' Abdul Hameed	Commercial Bank
Al Sane', Mohammed Abdulla	Kuwait Foods
Al Salem, Abbas Jouhar	Kuwait Transport (Chairman)
Al Salem, Jassim	Petrochemicals (Deputy Chairman)
Al Salem, Tariq Badr	Kuwait Cinemas
Al Salman al Sabah, Sheikh Fahd Du'aij	Kuwait Hotels (Deputy Chairman)
Samas, Sami Yacoub	Sanitary Ware
Al Saqr, Abdul Aziz Hamed	Oil Tankers (Chairman)
Al Saqr, Hamed Abdulla	Shipbuilding (Deputy Chairman), Al Ahleia Insurance
Al Saqr, Hamed Abdul Aziz	Gulf Cables (Deputy Chairman)
Al Saqr, Jassim Hamed	National Bank
Al Saqr, Khalid Abdulla	Flour Mills (Managing Director), IBK

Al Saqr, Wa'el Jassim
 Al Saqr, Youssuf Ahmed
 Al Saqr, Mareikan Sa'ed
 Al Sayer, Badr Musa'ed
 Al Sayer, Musued Abdulla
 Al Sayer, Nasr, Musa'ed
 Al Sayer, Sayer Bedr
 Al Sedirawi, Abdulla Jassim
 Al Sedirawi, Ghezi Fah
 Al Shalfan, Adnan Abdul Aziz
 Al Shalfan, Abdul Aziz Abdulla
 Al Shalfan, Saleh Abdulla
 Al Shamali, Youssuf Mohammed
 Al Shami, Khalid Ibrahim
 Al Shaye', Abdulla Abdul Latif
 Al Shaye', Ahmed Saleh
 Al Shate', Khalid Abdul Latif
 Shehab, Saleh Jassim
 Al Shaye', Feisal Abdul Rahman
 Shiba, Sabah Shaye' Abu
 Sultan, Fawzi Hamad
 Al Sultan, Mubarak
 Al Sultan, Salim Ibrahim Abdul Rahman

 Al Tammar, Abdul Wahab Ali
 Taqi, Mohammed Abdul Rahim
 Al Tarkeit Saleh Abdul Wahab
 Al Tayaar, Sa'oud
 Al Tukhaim, Ahmed Fahd
 Al Tukhaim, Barrek Abdul Mohsin
 Tuweirih, Abdul Mohsin Ali

 Wazzan, Abdulla Yacoub
 Al Wazzan, Jassim Mohammed
 Al Wazzan, Mohammed Abdul Aziz

KIIC
 Livestock
 Financial House
 Kuwait Oil Company (Managing Director)
 National Bank
 KIC
 Kuwait Tyres
 Livestock
 Refrigeration
 National Industries
 KIC
 KFTCIC (Government Director)
 United Real Estate
 Gulf Insurance (Chairman)
 KIC
 KIC, National Bank
 Commercial Bank, Land Transport
 Kuwait Hotels
 Gulf Insurance
 Food and Agriculture
 BKME (Managing Director), IBK
 Kuwait Tyres
 Kuwait Hotels

 KFTCIC (Chairman and Managing Director)
 Kuwait Cement
 Kuwait Poultry
 Refrigeration
 Sanitary Ware
 BKME
 Financial House

 Food and Agricultural Products (Managing Director)
 Gulf Insurance, Gulf Bank
 United Real Estate, Al Ahli Bank

Al Wazzan, Youssuf Abdul Aziz	KIIC
Al Wazzan, Ahmed Shehab	Kuwait Transport (Managing Director)
Tabaatabani, Abdul Latif Sayid Yassin	Livestock
Al Yassin Ahmed Bezie	Financial House (Chairman)
Wahib, Ahmed Shehab	Kuwait Transport (Deputy Chairman)
Al Zaid, Masha'ar Khalid	Kuwait Cinemas (Deputy Chairman)
Al Zaid, Zaid al Fahd	Real Estate Bank
Al Zaid, Abdul Razzak al Khalid	Oil Tankers
Al Zamil, Abdul Rahman Mansour	Al Ahli Bank
Al Zeben Feisal Sa'oud	Kuwait Insurance

The names of the companies above are not their full registered names. For the abbreviations of names of financial institutions see Table 4:1.

Source : Ministry of Commerce and Industry

FOOTNOTES TO CHAPTER 1

- 1) See Abdul Amir Amin, British Interests in the Persian Gulf (Leiden, the Netherlands : E.J. Brill, 1967), pp.126-141. Much of the trade remained in the hands of Eastern merchants, Indians, Jews, Armenians, and Arabs. The Dutch, Portuguese and French also completed work with the British for the trade. After 1765, there is no mention of the Dutch and Portuguese in the Gulf, and thereafter the British expanded their trade at the expense of both the French and the Eastern Merchants. British traders were either company employees (of the East India Company) or private individuals licenced by the company to trade with India.

- 2) Ibid, pp.129.

- 3) Ibid, pp.128-129. The exports from India to Basra consisted mainly of indigo, shawls, silk and cottons, sugar, sugar candy, various spices, chintz, chinaware, sandalwood, iron, lead, tin, rice, teak timber, and cloves.

- 4) Ibid, pp.128. These centres were Aleppo, Damascus, Alexandretta, and Constantinople.

- 5) Ibid, pp.129. Basra exported to India dates and tobacco, the products of the Pahaliq of Baghdad; pearl and a variety of drugs from Arabia; rock salt, brimstone, Kirman wool, silk, carpets, dried fruit, all from Persia; European goods which came by way of Aleppo, such as French, Dutch and English woollen goods, satins, gallons, jewellery, coral and Venetian ware. Also money in

German Crowns, "Venetians", and other gold and silver coins that came from the Ottoman Empire and Persia was exported, largely in payment for India's surplus in trade.

- 6) Ibid. pp.129. Exports from India to Bandar Abbas and Abu Shahr were all absorbed in Persia. These consisted of chintz, muslins, large quantities of Bengal and Surat piece goods of different sorts, sugar, sugar candy, chinaware, ginger, musk campher, black pepper, cummin, cinnamon, iron, lead, steel, tin, teak timber, and cloves. Persia exported to India silk, Kirman wool, carpets, tobacco, dried fruit, opium, rose water, copper, a variety of drugs and poisons and large quantities of gold and silver coins.
- 7) Ibid, pp.130.
- 8) See Molly Izzard, The Gulf (London : John Murray, 1979).

A.M. Abu Hakima, History of Eastern Arabia (Beirut : Khayats, 1965).

R. Stevens, The Arabs' Near Frontier (London : Temple Smith, 1976).

R. Hewins, A Golden Dream (London : W.H. Allen and Company, 1963).

A.T. Wilson, The Persian Gulf : An Historical Sketch from the Earliest Times to the Beginning of the 20th Century (Oxford : Clarendon Press, 1928).

- 9) A.M. Abu Hakima, op. cit.

- 10) J.J. Malone, "Involvement and Change : The Coming of the Oil Age to Saudi Arabia", in Social and Economic Development in the Arab Gulf, ed. Tim Nibloch (London : Croom Helm, 1980), pp.20-24.

- 11) A.M. Abu Hakima op. cit.

- 12) A.M. Abu Hakima op. cit.

- 13) In fact, this alliance continues today evidenced by such activities as the Bank of Bahrain and Kuwait, which was the only foreign Bank allowed to open in Kuwait. It was granted a licence by the Government in spite of opposition from the local Kuwaiti merchants.

- 14) Abul Amir Amin, op. cit., pp.132-135.

- 15) Ibid, pp.139.

- 16) Molly Izzard, op. cit.

- 17) Mohammed G. Rumaihi, "The Mode of Production in the Arab Gulf Before the Discovery of Oil", in Social and Economic Development in the Arab Gulf, ed. Tim Niblock. (London : Croom Helm, 1980), pp.49-60.

- 18) Ibid.

- 19) J.G. Lorimer, Gazeteer of the Persian Gulf, Oman, and Central

Arabia (Calcutta : 1908 -15, republished by Gegg International, Westmead, UK), vol. II, pp.2256-9.

20) Mohammed G. Rumaihi, op. cit.

21) Charles Issawi ed., The Economic History of Iran (Chicago : Chicago University Press, 1971), pp. 335-339.

It can be added here that the evidence shows that the economics of the Gulf Area, in particular the Pashaliq of Iraq and Persia reacted very much as predicted by the quantity theory of money as interpreted by the early theorists. Price inflation was the almost immediate result of currency shortages and debasement, resulting in a general lowering of incomes.

See also D. Bhattachareyya, A Concise History of the Indian Economy (Calcutta : Progressive Publishers, 1972) pp.200-212.

22) Compton Mackenzie, Realms of Silver (London : Routledge and Kegan Paul, 1954), pp. 41-44.

23) Ottoman Hampt, Arbitrages et parites (Paris : Librairie Truchy 1894) pp.811-830.

24) Charles Issawi, op. cit. pp.200 - 212.

25) E. Victor Morgan, A History of Money (Harmandsworth : Penguin Books, 1965), pp. 103- 125.

26) Charles Issawi, op. cit. pp. 200-212.
Ottoman Hampt, op. cit. pp.811-813.

- 27) Ibid.
- 28) Charles Issawi, op. cit., pp. 200-212.
- 29) Naval Intelligence Division, H.M. Navy, Iraq and the Persian Gulf (London : HMSO, 1944), pp. 486.
- 30) Ibid.
- 31) Ibid.
- 32) Ibid.
- 33) E. Victor Morgan, op. cit., pp. 163-166.
- 34) D. Bhattachareyya, op. cit., pp. 210-212.
- 35) M.E. Edo, "Currency Arrangements and Banking Legislation in the Arabian Peninsula", I.M.F. Staff Papers, Vol. 22, No. 2, 1975, pp. 510-538.
- 36) R. Hewins, op. cit.
M.W. Khouja and P.G. Sadler, The Economy of Kuwait : Development and Role in International Finance (London : Macmillan, 1979).
- 37) Great Britain and the Near East", Magazine, August 21st, 1943, pp. 47.
- 38) Great Britain and the Near East", Magazine, August 21st, 1947, pp. 52.

- 39) Mainly Al-Saqr, Al-Ghanim, and Al-Khorafi.
- 40) Al-Nusf and Al-Shaye'.
- 41) I. Najjar, The Development of a One Resource Economy : A Case Study of Kuwait (Indiana University : unpublished thesis, 1969).
- 42) R. Hewins, op. cit.
- 43) International Bank for Reconstruction and Development, The Economic Development of Kuwait (Baltimore : John Hopkins Press 1965)
- 44) I.B.R.D., op. cit., pp.3-4.
- 45) Ibid, pp. 4.
- 46) Al Rumaihi, op. cit.
- 47) Abdulla Al Nafisi, Kuwait : Another View (London : Private Press, 1978), in Arabic.
- 48) R. Hewins, op. cit.
- 49) I.B.R.D., op. cit., pp.4.
- 50) Al Rumaihi, op. cit.
- 51) These findings are the results of an article by Jassim Al

Saadoun.

Jassim Al-Saadoun, "Factors Affecting the Distribution of Income in Kuwait" Journal of Gulf and Arab Peninsular Studies, 1979 (in Arabic), pp. 60-93.

52) I.B.R.D., op. cit., pp.4.

53) D.K. Gandhi, A. Saunders, R.S. Woodward The Kuwait Stock Market (Calgary : University of Calgary working papers unpublished, 1978).

54) Ibid.

CHAPTER 2

THE CHOICE OF A CURRENCY

1) SEIGNORAGE AND THE COSTS AND BENEFITS OF AN INDEPENDENT CURRENCY

There are, theoretically speaking, three distinct possibilities facing an economy such as that of Kuwait on the eve of independence in 1961, in respect of its currency. The first possibility is clearly that it uses another country's currency for internal transactions. Examples of such a system abound. Panama, Liberia, and the British Virgin Islands, use or used until recently, the U.S. dollar. Botswana, Lesotho, and Swaziland use or used until recently, the South African Rand. Luxembourg uses the Belgian Franc. Until 1961 Kuwait used the Rupee as we saw in the last chapter.

The second possibility is to create an independent currency but form a monetary union with other, presumably neighbouring states. Fewer examples are available of this kind of monetary system. The C.F.A. Franc area in West Africa is one such example where the currency is also linked directly to the French Franc, and another was the East African Shilling. But although monetary integration has been the subject of serious study among European countries, Latin American countries and Arab countries there are only a few historical instances of actual integration and most of these have not lasted for long periods of time. Interestingly enough, the Gulf has been the scene of many such historical instances. The currency agreement between Qatar and Dubai signed on March 21, 1966, was one such instance (1). The third

alternative open to Kuwait was to create an independent currency of its own and either fix its exchange rate to the currency of another country or manage the exchange rate in any way it saw fit. Chapter 6 devotes itself to the issues of the management of the exchange rate of an independent currency. In this section we shall try to assess the costs and benefits of a country having its own currency as opposed to using that of another country.

Geoffrey Maynard examined the use of the U.S. dollar in Liberia in 1970 (2). He does not see any major disadvantages for the Liberian economy of using the U.S. dollar. On the contrary, he sees the foreign ownership of banks as substantially more detrimental to the progress of the economy:-

"Of greater importance (than using the U.S. dollar) in this respect are the constraints imposed by the present structure of the economy, and by the fact that ownership and control of practically the whole of the productive sector, at least as far as the monetary economy is concerned, are in foreign hands"

(3)

We shall be analysing the role of commercial banks in currency-board economies, and the question as to whether or not their lending practices mitigate or emphasise the impact of the balance of payments of these economies on their money supply, in Chapter 3 (4). Maynard, somewhat in the same way as Polak (5), does not see that a separate currency facilitates the financing of development since this ultimately depends on the export performance of the country concerned or its international reserves. He also shows that in the case of Liberia, a separate

currency may provide the government the ability to alter its exchange rate but that devaluations and revaluations would not have much of an impact on the exports and imports of the country while invariably occasioning disadvantages greater than the advantages involved.

Maynard sees the creation of the central bank as a separate issue to that of the creation of an independent currency, and we have followed the same distinction, reserving the issues connected with the creation of central bank credit and the currency-board system for Chapter 3. However, it is not entirely a separate issue as we shall see below, when discussing the specific question of seignorage.

Arnold Harberger tries to calculate the seignorage the Panamanian government would benefit from if it switched the U.S. dollars in circulation in the country to Panamanian Balboas (6). Seignorage is the main direct benefit to a government of creating an independent currency:-

"The original meaning of seignorage, the difference between the circulating value of a coin and the cost of bullion and minting, involves a once and for all gain to the issuer on the issue of money" (7)

In Panama, Harberger shows that by the local central bank taking over the foreign assets and liabilities and issuing Balboas (local currency) for the difference, the immediate gain to the country is the interest earned by the government on their foreign balances. However, it is clear that such interest could also have been earned by the local commercial banks, and that the only portion of the money supply that would have missed out on earning such interest would have been currency

in circulation. Simply put, if in 1965 currency in circulation in Panama was B/40.5 million then at the interest rate ruling at that time for U.S. dollars of 4% per annum for deposits of one year or below, the benefit would have been B/1.62 million per annum.

In considering what the benefit is to the government from the extension of central bank credit to the government, the issues of an independent currency and the creation of a central bank become intertwined. Harberger sees that printing B/1 million is a benefit of B/1 million. If the central bank buys a 5% per annum bond, the present value of this annuity (B/50,000 per annum) discounted at 5% per annum is B/1 million. The repayment of the bond by the government extinguishes this benefit and what is left is the interest paid on the bonds. However, Harberger does not address himself to the relationship of seignorage to welfare gains and losses through the issuance of currency. Johnson (8) looks closely at this point. He shows that in an environment of monetary stability and no growth, the social saving from the issue of paper currency is the release of real resources that can be used for productive purposes. Seignorage is the command over real resources occasioned by the issue of paper money by the central bank which is then invested in productive assets when the monetary authorities have exercised their command over real resources. In a growing economy, a fixed money supply would lead to falling prices and the consequent yield on money balances and the related welfare gain would correspond to the amount of seignorage. But where new money is printed to allow a stable or rising price level, there is a zero or negative yield on money balances. The social saving from the issuance of money therefore drops below the level of seignorage by a factor Johnson calls the "inflation tax".

If Kuwait had not had an independent currency it would have lost the accumulated interest on the level of currency in circulation in the Kuwaiti monetary system, since the central bank in Kuwait has never issued currency against advances to the government of Kuwait. Harberger discusses the levels of foreign asset backing of high-powered money (Reserve Money) in various countries between 1960 and 1964, and finds that only Switzerland, the Netherlands, Israel and Thailand have greater foreign assets than high-powered money (Reserve Money). Panama, which is the object of his study had a ratio in 1965 of 0.53 per cent. In the same year central bank foreign assets (equal to net foreign assets) in Kuwait were KD. 44.3 million while the net foreign assets of the commercial banks were KD. 182.5 million. Reserve Money, as defined in the International Financial Statistics of the International Monetary Fund, and as used by Harberger, was KD. 37.0 million. The ratio which Harberger should have calculated for Kuwait in 1965 therefore was 612 per cent (as opposed to 130 per cent for Thailand which was the highest result in his table). Graph 3:3 shows the ratio of bank reserves to deposits both including and excluding the net foreign asset of the commercial banks. In Chapter 3 we shall analyse the importance played by the net foreign assets of the commercial banks in the monetary system in Kuwait, but for our immediate purposes here, Graph 3:3 shows the difference made to reserves by net foreign assets of the commercial banks in Kuwait, although this difference began to decline after 1972.

The possible benefit to the Kuwaiti monetary authorities of seignorage from the creation of an independent currency was limited due to the surplus in Kuwait's balance of payments and the country's extraordinarily high level of foreign exchange reserves. The starting point in the explanation of the insignificance of seignorage to the Kuwaiti monetary authorities, is the fact that the commercial banks did not surrender

their foreign assets to the central bank when the Kuwaiti Dinar was being substituted for the Rupee. If we imagine that the Central Bank of Kuwait were to substitute U.S. dollars for Kuwaiti Dinars, it would have had to call in Kuwaiti Dinar notes and pay out U.S. dollar notes in exchange, out of its foreign exchange reserves. Let us assume that the time chosen for such an exchange were to have been the fourth quarter of 1980, if we refer to Table 5:1, we can see that the central bank would have had to pay out a total of KD 268.7 million in dinar notes as replacement or KD 251.3 million to the public and KD 17.4 million to the banks, while its foreign exchange reserves would have dropped dramatically from KD 1080.8 million to KD 812.1 million. In Table 3:3 we see that the average of the daily quotations for 3 month Eurodollars for the last quarter in 1980, was 17.10 per cent per annum. This means that the central bank would lose KD 45.68 million annually (at the above interest rate). Interest rates fell after the fourth quarter of 1980, so this loss could have been slightly less. At the same time bank balances held by the central bank were KD 129.5 million, while Central Bank Bills owned by the banks were KD 108.0 million. These balances and bills were interest bearing, at a rate of around 5.5 per cent per annum, while the central bank was earning a much higher rate on its U.S. dollar reserves at the time. The difference between interest earned and interest paid out, therefore, would be around KD 27 million and would have accrued to the banks if the US dollar was adopted as the local currency. This extra interest that would be earned by the banks on an amount of KD 237.5 million, would have made little difference to their overall interest earnings which were being paid by foreign banks on a total of net foreign assets of KD 745.8 million outstanding at the end of 1980. The monetary authorities themselves would lose around KD 73 million per annum, or less than 7 per cent of their investment income in 1980, while the country as a whole would lose the interest earned on the note circulation (at the time of our example these earnings would have been running at around KD 45 million per annum).

ii) THE ESTABLISHMENT OF AN INDEPENDENT CURRENCY IN KUWAIT

As we saw in Chapter 1, Kuwait adopted a new currency called the Kuwaiti Dinar to replace the blue Gulf Rupee (on 1st April, 1961) [9]. The initial idea behind the creation of this new currency was that it should become part of the Sterling Area, and that it should also be managed in the traditional framework of Currency-Board economies in the Sterling Area. In Chapter 3 we discuss traditional monetary arrangements in Britain's colonies and protectorates [10]. However, Kuwait's neighbour, Iraq, predated Kuwait in the establishment of an independent currency and to a certain extent served as an example to follow. The Iraqi Dinar replaced Ottoman currency and Indian Rupees on the 1st April, 1932. Under the law that instituted this change the value of the Iraqi Dinar was fixed to Sterling. The Iraqi Currency Board itself sat in London and paid over the revenues from the investment of the country's reserves to the Treasury in Baghdad on a yearly basis [11]. The Kuwait Currency Board was established on October 16th, 1960, in Kuwait in advance of the establishment of the new currency to prepare the mechanics for the management of the currency. The balance of payments crisis of 1959 in India had caused considerable embarrassment and the Bank of England was concerned that the Reserve Bank of India should not again face the same pressures from the bullion smuggling trade. The creation of the blue "Gulf" Rupee was intended as a temporary measure prior to the establishment of an independent currency for Kuwait.

The idea behind the creation of the Kuwaiti Dinar, therefore, was not that Kuwait should be a separate currency area, but that it should be part of a fixed-exchange system linked to Sterling. The currency-board

system was more-or-less British colonial policy (12), where the note issue in any country under British influence would be completely backed by sterling investments. Some of Kuwait's reserves were held in gold but most of them were made in the money markets, bonds, and "blue chip" equities in the London money and capital markets (13). We saw in Chapter 1 that the Kuwait Investment Board (established in 1953) managed these investments. The existence of the Kuwait Investment Board in London meant that it was not necessary to follow the Iraqi example and the new currency-board itself could successfully be based in Kuwait. Sterling was a reserve currency until 1967 and the maintenance of its value was an important aim of successive British governments. The Kuwaiti government did not try to diversify its investments or to hedge against the future value of Sterling. Despite a limited amount of non-sterling investments, therefore, Kuwait at the time of the creation of its currency, was effectively a Sterling Area member. Kuwait's surplus allowed the Currency Board easily to maintain the one hundred per cent note-cover rule without affecting the economy negatively. Other currency-board economies with scarce capital were not so fortunate as this as we shall see in Chapter 3.

The establishment of a currency for Kuwait, therefore, was, in so far as the Kuwaiti monetary authorities were concerned, historical accident. It has not been policy to maintain an independent currency for its own sake. On the contrary, there have been attempts at uniting the Gulf currencies in recent years chiefly in the period after 1973 and in particular with the formation of the Gulf Cooperation Council which was created essentially for security reasons but also to explore possibilities of monetary and economic integration between Gulf states. However attempts at monetary integration have met with serious obstacles. Not least among these obstacles is whether or not the

monetary unification of the Gulf currencies would bring the area any social or economic benefits.

iii) OPTIMUM CURRENCY AREA CONSIDERATIONS

It would seem at first glance that Kuwait is too small to be an optimum currency area. The traditional theories on the optimum currency area problem appear overall to concentrate on size (and its different economic implications) as an important criterion in determining the feasibility of a particular country having a separate currency. The smaller a particular area is, it would seem that it is easier for that area to adjust within a common currency area, and the greater the difficulty it would have in exercising independent command over monetary and exchange rate policies. Let us look at the reasons for this and the arguments for and against a small region belonging to a common currency area.

The central problem suggested is that if there should occur a payments imbalance for a particular region which has no independent means of altering an exchange rate vis-a-vis the rest of the world, unemployment, forced migration and a drop in incomes and wealth result. It could, let us assume for theoretical purposes, adopt a new currency and alter relative costs and prices by devaluing the exchange rate of that currency against all other currencies, assuming that it would find it difficult, in the face of a drop in demand for its products, to reduce living standards to achieve the same result (deflation). Even if a small area did obtain monetary autonomy however, and was able to vary its exchange rate, it is dubious whether this would be nearly as successful as in the case of a larger country. Of course one argument

in favour of exchange rate variation by a small country is that the elasticity of demand for a small region's exports should usually be higher than for larger areas. Despite a greater possible concentration of production on a few products, that country would generally speaking provide a smaller proportion of world supply and should, therefore, find it easier to displace other suppliers, should it lower its export price. Whether devaluation is actually preferable to deflation depends upon the following equation holding:-

$$1 + \frac{1}{m} > \frac{\eta_x + \eta_m}{\eta_x + \eta_m - 1}$$

where (m), in this case, is the marginal propensity to import, (η_x) the external elasticity of demand for the small region's exports and (η_m) the elasticity of demand for imports. Although (m) will be higher in a small region, so will (η_x) be. The value of (m) is bounded, but (η_x) can rise to infinity. This expression is valid on the assumption of completely elastic supplies of goods. If the higher external elasticity of demand for the exports of a small country, does not outweigh the effect of its greater propensity to import than other countries, this might make deflation a better method (in terms of minimizing a drop in the standard of living) of achieving adjustment to a deficit in the balance of payments, than a devaluation (14). The above expression is a variation on the well known Marshall-Lerner condition for stability in exchange rate adjustment which we discuss in Chapter 6. The Marshall-Lerner condition says that for a non-perverse balance of payments adjustment to follow upon a devaluation, the sum of the average propensity of world demand for the country's exports plus the average propensity for domestic import demand must exceed unity, such that the cost effect of a relative rise in the price of imports vis-a-vis exports does not dominate the effect of the rise of exports

and decline of imports in physical terms. The expression for the Marshall-Lerner condition is, $x + m > 1$. The earlier expression however, can be reduced to the following:-

$$\eta_x + \eta_m > 1 + \frac{1}{m}$$

$$\text{or } m (\eta_x + \eta_m - 1) > 1$$

A relative price change induced by devaluation exerts both income and substitution effects on the trade balance. The elasticities for exports and imports can be split up into these two effects by separating the two parts of the elasticity equations as follows:-

$$\eta_x = (dX/dp) P/X$$

$$\eta_m = (dM/dp) P/M,$$

where p is the relative price of imported goods in terms of importables, X is exports and M is imports, both in volume terms. From this, one can deduce that the Marshall-Lerner condition boils down to the fact that the sum of foreign demand for the exports of the country in question and its propensity to import should exceed unity.

Such a high elasticity of demand for exports as to make a devaluation worthwhile, does not, however, seem to apply to a petroleum producing state in the Gulf, which has a fairly high inelastic world demand for its export product, and a high marginal propensity to import.

The above analysis assumes that a devaluation in a country could succeed in reducing real wages in the small region. In other words, it assumes that there would be a one for one correspondence between an exchange depreciation and the terms of trade worsening for that country. The

high propensity to import of a small region (what is generally called its openness) will cause any variation in the exchange rate to be rapidly reflected in a nearly equivalent (inverse) shift in prices. Such a large and obvious effect of devaluation on real wage rates and living standards may call forth greater resistance on the part of labour. This will be greater the more that social unity between the area in question and contiguous areas, encourages a comparison between living standards and prompts people in similar occupations in different regions to demand similar real living standards. This problem would reflect the absence of money illusion among the people of the economy in question. McKinnon (15) argues that a high degree of openness means that a small open economy should not use flexible exchange rates to correct instability as it is likely to suffer from a greater instability of prices and a high level of unemployment should be needed on the average to maintain overall stability. A number of small open areas in this context, trading with each other would find it beneficial to form a relatively closed common currency area. He also discusses the absence of money illusion as being an additional obstacle in the way of making exchange rate variation effective in correcting payments imbalances.

There are a number of different strands in the above argument that need separating out for clarity's sake. Adjusting for the external balance may not be the only macro-economic goal of the monetary authorities in a particular country. McKinnon recognises this implicitly by discussing the problem in terms of the unemployment cost of certain policy measures. But clearly devaluation and deflation need not be considered as alternatives but as complementary policy tools in certain situations. This is discussed in Chapter 3 (16). In the context of optimum currency area theory, however, this is not a directly relevant problem. More important is the assumption in our discussion of the Marshall-Lerner

condition that the effects of devaluation, or a depreciation of the exchange rate of the domestic currency, do not lead to offsetting domestic price increases. It is clear, however, that among the effects of a devaluation is an unambiguous reduction in the standard of living, and, in this case, real wage resistance may pose a serious obstacle to complete adjustment (17). The last strand of argument that needs to be isolated, is the idea that openness of an economy will cause an exchange rate variation to be rapidly reflected in a nearly equivalent inverse shift in prices, and that it is this occurrence which would accelerate a situation of real wage resistance. Two important assumptions in the McKinnon optimum currency-type model, are firstly, that in the small country case the terms of trade are exogenous, and therefore that the distinction between importables and exportables is not necessary. They can be aggregated into a "traded" goods category. Secondly, it is also assumed that the country in question produces only exportables, which is a more restrictive assumption than the first. The introduction of non-tradeables, in which foreigners have a zero propensity, into such a model, would mean that the income effect of a rise in real wages would be stronger than in the simple tradable goods-model (18).

So it is not entirely clear from the above discussion, whether a small open economy should have a separate currency or not. We could say that it depends, as we said earlier, on the relative importance of the elasticity of demand for the country's exports and its marginal propensity to import. Or we could say it depends on how integrated an area is within a broader social and cultural context, creating the absence of money illusion and various demonstration effects, which would act as serious obstacles to the smooth functioning of the adjustment of imbalances through exchange rate variations. Corden (19) argued that McKinnon's "openness" criterion was not a general one. He argues that

the openness criterion applies only in the case of micro-economic changes in demand that take place at home and does not apply to the problem of macro-economic disturbances that occur abroad. This can be seen at once by a casual analysis of the assumptions of McKinnon's model which include (A) that the principal need for payments adjustments arise from micro-economic changes in demand and supply conditions and (B) that price stability prevails in the rest of the world. If the international economy itself is unstable, McKinnon's conclusion would have to be completely reversed, because external instability would be directly propelled through to the domestic economy through the fixed exchange regime.

Kenen (20) shows that a fairly small region often concentrates upon the production of a few goods, or sometimes only one staple product (like petroleum) so that its balance is bound to be frequently disturbed by minor variations in tastes, technology, or in foreign competitiveness, while a larger country should find some of these somewhat random developments offsetting each other. Such a low degree of product diversification in Kenen's view is a good reason for forming an independent currency area.

It is easy to see why Kenen's "low-diversification criterion" comes to a conclusion that is the exact opposite of the conclusion arrived at in the McKinnon "openness criterion". Kenen is interested in external shocks to export products and not with internal shocks. We ask whether we should conclude that we look to those theories that concentrate on macro-economic phenomena and dismiss the rest. Harberler (21) and Fleming (22) suggest that the main cause, historically, of payments imbalances has been divergent trends in national inflation rates. The arguments put forward by them are relevant, but

fundamentally, these arguments appear to be circular and do not deal directly with the question of optimum currency areas. Divergent inflation rates are the natural consequence of separate currencies and independent monetary policies permitted by floating or quasi-floating exchange regimes. Currency areas become the explanatory variable and no longer the explained variable in those theories. As a consequence it is difficult to answer our questions to whether we should look primarily at external macro-economic shocks or micro-economic fluctuations and changes in the domestic economy as the prime concern.

A convincing argument favouring a separate currency for small areas can be made by looking closely at the real content of McKinnon's argument. The interpretation of his argument should actually be in the form of Corden's qualification (23) - the higher the marginal propensity to import for an area, the less costly it is to maintain fixed exchange rates in terms of the required increase in the unemployment rate to effect the same degree of payment imbalance improvement as in economies using an exchange rate. On the other hand, the higher the elasticity of demand for that country's exports, the narrower its range of products, and the more unstable the external world, the more costly it is to maintain fixed exchanges. This is a convincing argument for a separate currency for a small area if such a small area has a high foreign elasticity of demand for its exports and a relatively low marginal propensity to import. This we stated clearly is the opposite of the case ruling in Kuwait. If the problem were to be adjustment with the Gulf States, the only real obstacle to the arguments favouring a separate currency in the McKinnon approach would be the absence of money illusion. However, as we shall see, Kuwait's main problem is adjustment vis-a-vis the major industrial economies.

Social unity and cultural homogeneity could be a much stronger criterion than the one of size in determining whether a specific area should have a separate currency. To some extent it must be considered "academic" to ask the question whether Virginia can be spun-off as a separate currency area, not just because of any political realities but also because its integration into a larger nation-state gives it certain characteristics it would not have otherwise. Therefore, apart from the fact that it is more costly for a small area to adapt to imbalances than larger countries, those areas that have historically been integrated into larger nation-states are affected in four different ways:-

- i) Cultural and social homogeneity implies the absence of money illusion and this acts as an effective obstacle to a region managing a separate currency.
- ii) Migration from that region into neighbouring areas is possible being socially acceptable and politically possible, allowing adjustment to imbalances by direct means.
- iii) Any pockets of labour immobility or obstacles to migration in the form of a lack of a neighbouring job opportunities can be overcome through fiscal measures taking into account costs of fiscal administration. Fiscal integration and political cooperation allows depressed areas to receive subsidies encouraging a reversal in the decline in incomes and wealth due to a regional deficit.
- iv) A region benefits from the integrated capital market of its nation-state. Integrated capital markets imply the acceptability of any region's financial assets nationwide and the sale of these assets allows an area to finance current account imbalances.

Clearly if the imbalance in a region is chronic the running down of financial assets will lead to a serious drop in wealth at which time forced migration is induced and fiscal and regional subsidies have to take over.

The flow of capital and labour are important adjustment factors. Mundell (24) chose a high degree of factor mobility within an area as a basis for currency unification. On the assumption that a demand shift is the cause of balance of payments dis-equilibria, Mundell focuses on the condition under which payments adjustment can be made with minimum burden to the regions affected by the shift.

"This seems to imply that regions ought to be defined so narrowly as to count every minor pocket of unemployment arising from labour immobility as a separate region, each of which should apparently have a separate currency" (25)

We face, however, costs of currency conversion and ultimately we are lead to a situation of barter which negate the savings created by the use of currency in the first place. To balance these factors out we use some of the arguments developed in our discussion of the characteristics of the relationship between the region and the nation-state in points (i) - (iv) above. A compromise, in Mundell's model, can only be reached if we talk about labour immobility relative to the ability in the short-term for the area to finance current account deficits, and in the long-term, its ability to summon fiscal aid and credits. So the small pockets of unemployment created by labour immobility are not a complete justification for the creation of a separate currency area, but rather for the creation of cultural or linguistic blocks or ultimately

political blocks which become nation-states and which therefore eventually justify the existence of their own currency and mitigate the need for regional currencies. Social and cultural unity is an obstacle in the use of exchange rates for regional adjustment but, as we see here, is also a justification for the continuance of regional integration into the common currency area of the nation-state. While secession by areas has been discussed on occasion within an economic context (Scotland and North Sea Oil) there is invariably a political background to the question (Scotland's and England's age-old rivalry). Most famous attempts at secession are politically motivated (eg. Quebec, Basques, Italian Tyrol, etc.).

While it is, as we have seen, "academic" to talk of regions within nation-states seceding, we note that many small units (smaller than Virginia, Texas or California) actually run independent currencies. While the additional costs, in terms of extra unemployment, forced migration and the reduction of incomes and wealth, of adjusting for imbalances without a variable exchange rate seem clear and obvious; the offsetting gains that might attract these smaller units into larger currency areas are more nebulous. The two obvious positives are the saving of exchange reserves and the elimination of speculative capital flows, both of which are difficult to ascertain quantitatively as benefits but are marginal in any case. The most important positive aspect would be that monetary integration accelerates fiscal integration and capital market integration, which is the mirror-image of our earlier argument that regions benefit from membership of the nation-state for fiscal and capital market reasons, among others.

It would seem not only that social unity could be a strong criterion for determining the optimality of a currency area but nation-hood itself

could be said to be such a criterion. The political reality of the importance of the right of seigniorage to an independent government reinforces this result. Both seigniorage, the related exclusive right to issue currency, and the right to conduct independent monetary policy, have been at the centre of political obstacles to the process of monetary integration. Fixed exchanges imply a relinquishing of the right to control money supply and to vary the exchange rate (26), while currency union means the currency issue and its printing may be based outside your own borders.

Too much emphasis has been put on size with its implications for openness and diversity as a determinant of the costs of adjustment within a single currency area, and not enough on social and political unity. It is difficult to condemn a country of whatever size for deciding to adopt an independent currency within the context of current theories and difficult in particular in the case of Kuwait. Some of the points in respect of Kuwait's case can be listed briefly prior to reaching a qualified conclusion on this subject:-

- i) Kuwait is a surplus entity and is under no pressure to adjust. Recent experience, however, of dropping petroleum demand and declining prices have brought up the question of the longer-term.
- ii) Kuwait is a two-tier economy as quite clearly the management of the exchange rate does not affect the petroleum market. The pricing of oil has to be looked at alongside the management of the exchange rate for an overall assessment of Kuwait's relative cost and price position.
- iii) Although Kuwait and its neighbouring countries, Iraq,

Saudi-Arabia, Qatar, Bahrain, the United Arab Emirates and Oman (together known as the "Gulf States") have a large degree of cultural and social unity, thereby allowing fiscal and capital market integration and creating obstacles to the use of relative exchanges in the Gulf to correct imbalances, the situation does have peculiarities. The main peculiarity is that these countries hardly trade with one another and have the same one-product economy. Integration is unlikely to reduce the average exposure of each country to external shocks, and relative costs and prices within the Gulf are always likely to develop in the same fashion preventing a need for major realignments between Gulf currencies (as would not be the case for European currencies, for instance).

When discussing Kuwait as an optimum currency area it is always extremely important to remember point (ii) above and the fact that its only export product is not priced in Kuwaiti Dinars but in U.S. Dollars. Kenen's (27) model encourages a separate currency for a one-export product economy like Kuwait, but we have to remember our point that successful exchange rate variation requires the elasticity of demand for the exports of the country to be high, and in particular it should outweigh the effect of the greater propensity to import of a small one-product economy. In the case of Kuwait it does not, since oil has a highly price-inelastic demand factor, and Kuwait has a high marginal propensity to import which would make it cheaper (in terms of the drop in absorption of goods) for the country to deflate. The social unity with neighbouring states would also make it difficult to reduce real wages by devaluation.

This argument may point to the fact that Kuwait is not an optimum currency area. However, there are the obvious points we made earlier

which make it not worthwhile for Kuwait to integrate with its neighbours. Firstly, such integration would not average out external shocks to the economy, since all Gulf states have roughly the same one-product economy, and the fact that they import almost everything else apart from oil, the relative costs and prices are unlikely to diverge to a significant extent thereby leading to the need for exchange rate adjustments. Mundell's (28) labour mobility argument does not argue in favour of Kuwait joining its neighbours either, because although there is labour mobility of nationals of the Gulf states between the states, the area as a whole is a labour deficit area and imports manpower chiefly from Egypt and the Indian sub-continent, and this labour force is not mobile between the Gulf countries but only from their country of origin (strict immigration barriers prevent them crossing borders between the Gulf states).

Implicit in the idea that one-product areas should integrate with larger areas (if their export products don't have a high price elasticity of demand) and that so should areas of factor mobility (both capital and labour) are themes that have been common in the Arab league call for Arab economic integration. The motive of this call is primarily political. As we showed in the preceeding analysis of the concepts behind optimum currency area theory, social and cultural unity is a much stronger criterion of the determination of an optimal currency area than size which can only be a secondary argument, and which also can only really serve as a general consideration, rather than as a definite criterion (since it doesn't cut clearly either one way or the other). The drive for Arab unity is a concept founded on Islamic principles of brotherhood and reinforced by President Nasser in his regime between 1952-70. Arab economists have used economic arguments to back this political manifesto (29). Certainly there are more arguments in favour

of a broad integration of Arab states rather than an integration of just the Gulf States. Product diversity and factor complementarity leading to high factor mobility would be the basis of such integration. However, clearly, the problem for Kuwait is adjustment vis-a-vis the major industrial economies. Monetary integration with all Arab economies is academic, and with Gulf economies, it seems to be unnecessary.

iv) IMPLICATIONS FOR KUWAIT OF OPTIMUM CURRENCY AREA THEORY
AND CONCLUSIONS ON THE CHOICE OF CURRENCY

Two criteria appear in the relevant literature to determine whether an area should have a separate currency or not - (1) size and (2) social unity with contiguous areas. The question of size leading to certain indeterminacies, we conclude that social unity is a substantially more important criterion than size, although we still have to look at the effect of a country's size on its ability to adjust to payments imbalances without a separate currency. The smaller an area, the greater its marginal propensity to import and the less costly it is for it to maintain fixed exchange rates in terms of the required increase in unemployment, if the origin of the imbalance is internal demand and supply changes. If we are concerned with external shocks then the smaller the area and less diversified it is, the more it will suffer on the average. The question of external shocks therefore requires the operation of a separate currency in the case in particular of an economy with a low-diversification of production. Such an economy will be able to successfully vary an exchange rate in the face of external shocks, as long as its export products have a price-elasticity of demand higher than its marginal propensity to import.

Kuwait is small but it has a high marginal propensity to import and its only export product (petroleum) has a low price-elasticity of demand. All this should point to Kuwait being part of a common currency area and not using the exchange rate as a tool to compensate for external shocks. J.R. King develops a model where prices and wages are flexible and the full employment level of output can be reached, and where the equilibrium domestic price level depends positively on the foreign price level and inversely on the effective exchange rate (30). He discusses the use of the exchange rate to stabilize the domestic price level in an open economy, and considers that exchange rate policy for the management of the internal balance, is a natural complement to domestic credit expansion, which can be used for the management of the external balance. We shall discuss this model in Chapter 3, and its implications for exchange rate policy in Chapters 5 and 6. The macro-economic implications of King's analysis seem to contradict the results of optimum currency area theory. As we saw earlier, however, policy allocation theory has different concerns to optimum currency area theory (31).

Social unity as a criterion is theoretically more definitive than size in as far as the determination and definition of an optimum currency area, since it lays the ground for regional adjustment to both temporary and chronic payments imbalances. Integrated capital markets allow regions in a common currency area to easily finance current-account imbalances, while in the case of chronic imbalances cultural ties permit migration and subsidies for depressed areas. The social unity criterion would appear to define Kuwait as an area that should unite with its neighbours since there are extremely strong tribal, linguistic and religious ties between the Gulf States (comprising of Iraq, Kuwait,

Saudi Arabia, Bahrain, Qatar, the United Arab Emirates and Oman). However, the irony of the situation is that the lack of trade between these areas, the lack of complementarity and the similar economic structures make such a union pointless since (i) relative prices and costs between these countries are unlikely to diverge in a real sense and (ii) the same fate will always befall one area as will befall all the others in respect of external shocks. Philosophers of "Arab unity" have seized on this opportunity to justify unification of all Arab countries. They argue that since Gulf unity makes no sense, wider unity is necessary and there is, in theory, substantial complementarity between the 22 Arab countries stretching from the Atlantic to the Indian Ocean. Quite clearly the marginal propensity to import (or openness) criterion along with the price-elasticity of exports criterion (both sub-criteria of the size criterion) would make it more efficient if Kuwait were part of such a common currency area. But such wide monetary integration is not relevant to the considerations of the authorities in Kuwait and where the unification of Gulf currencies faced serious political obstacles in respect of solving the problem of the management of the single resulting currency, the unification of all Arab currencies would face that many more political obstacles as more countries became involved.

The major problem for Kuwait is adjustment vis-a-vis the major economies and not the Gulf or indeed the Arab economies in the wider sense. Consequently, the question of the use of the U.S. dollar as its internal currency is more relevant than questions of monetary integration with Gulf or Arab economies. It is also more immediately practicable in terms of ease of implementation. We have seen that the seignorage gain for a country like Kuwait, by virtue of the creation of its own currency, is minimal. We have also seen that, historically speaking,

the existence of the Kuwaiti Dinar was the responsibility of British planning and not of the Kuwaiti government itself. The one important criticism of the possibility of using the U.S. dollar as Kuwait's currency, is the diversified trade that Kuwait has with all the major industrial economies in the world, which we can see in Tables 6:1 to 6:4. Therefore, adjustment vis-a-vis its trading partners cannot be solved by looking unilaterally at the U.S. dollar, but rather at some kind of basket of currencies. The questions revolving around Kuwait's effective exchange rate and the optimal peg are reviewed in detail in Chapter 6.

In view of the continuing use of the Kuwaiti Dinar, the Kuwaiti government and in particular the Ministry of Finance can be seen as running a sub-economy denominated in Kuwaiti Dinars with the express purpose of creating an independent and productive private sector. The government was not satisfied with the idea of merely exporting petroleum and providing for Kuwaiti citizens with the proceeds, but planned for eventual diversification away from petroleum by the creation of new industries. The diversification desire was strong enough to force the government to dilute the Kuwaiti population by allowing the immigration of both skilled and unskilled labour demanded by Kuwait's indigenous economic growth. As we saw in Chapter 1 the motivation for the government to take these steps was partly political. We also saw in Chapter 1 that the policy of promoting the stock market came after the realisation that a transfer of wealth to the private sector engineered through a land acquisition programme was not beneficial to the local development of industry. The existence of an independent currency was not necessary to achieve these aims, in fact it can be seen as a problem that has to be contended with in order to achieve them.

In this context, and in view of the fact of the partial failure of the

land acquisition programme and the Kuwait stock market to keep wealth accrued to the private sector from being exported, the management of the local currency was used to try to keep Kuwaiti capital invested at home. Whether or not this was a justifiable policy is a different matter and we deal with this at the end of Chapter 6. As we shall see in Chapter 6 (Graph 6:1), the monetary authorities have attempted to keep the Kuwaiti Dinar as stable as possible among all the major currencies, which policy requires precisely the flexible basket that has been used, given the large volatility of currency exchanges since floating exchanges were instituted in 1973. But it is important to understand that the monetary authorities in Kuwait did not create an independent currency. They inherited the Kuwaiti Dinar and have tried to manage it sensibly, while for political reasons there have been a number of initiatives taken in the context of the Gulf Cooperation Council, with a view to unifying the currencies of the Gulf states, although as we have seen, this does not solve any basic problems of the Kuwaiti economy's adjustment needs.

FOOTNOTES TO CHAPTER 2

- 1) Michael E. Edo, "Currency Arrangements and Banking Legislation in the Arabian Peninsular", I.M.F. Staff Papers, Vol. 22, No. 2, July 1975, pp. 510-538.

- 2) Geoffrey Maynard, "The Economic Irrelevance of Monetary Independence : The Case of Liberia", Journal of Development Studies, Vol. 6, January 1970, pp. 111-132.

- 3) Ibid, pp. 111.

- 4) See Chapter 3, pp. 94-100.

- 5) Ibid. pp. 94.

- 6) Arnold C. Harberger, "Reflection in the Monetary System of Panama", in Chicago Essays in Economic Development, ed. D. Wall (Chicago : Chicago University Press), pp. 158-173.

- 7) Harry G. Johnson, "Seignorage and the Social Saving from Substituting Credit for Commodity Money", in Further Essays in Monetary Economics, H.G. Johnston (London : George Allen and Unwin 1972), pp. 263.

- 8) Ibid.

- 9) See Chapter 1, pp. 24.

- 10) See Chapter 3, pp. 94-100.
- 11) Naval Intelligence Division, H.M. Navy, Iraq and the Persian Gulf (London : H.M.S.O. 1949), pp. 478.
- 12) Arthur Hazelwood, "The Economics of Colonial Monetary Arrangements", Social and Economic Studies, December 1954, pp. 291-315.
- 13) M.W. Khouja and P.G. Sadler, The Economy of Kuwait : Development and Role in International Finance (London : Macmillan 1979), pp. 195-6.
- 14) C.A.E. Goodhart, Money, Information and Uncertainty (London: Macmillan 1975) pp. 292.
- 15) Ronald I. McKinnon, "Optimum Currency Areas", American Economic Review", vol. 53, September 1963, pp.717-25.
- 16) See the literature listed in Footnotes to Chapter 3, No. 12, pp. 168.
- 17) Rudiger Dornbush, Open Economy Macro-Economics, (New York: Basic Books 1980) pp. 70-76.
- 18) op. cit., pp. 87.
- 19) W. Max Corden, Monetary Integration, Essays in International Finance, No. 93 (Princeton University Press, 1972).

- 20) Peter B. Kenen, "The Theory of Optimum Currency Areas : An Ecletic View", in Monetary Problems of the International Economy, ed. Robert A. Mundell and A.K. Swoboda (University of Chicago Press, 1969), pp. 41-60.

- 21) Gottfried Harberler, "The International Monetary System : Some Recent Developments and Discussions, in Approaches to Greater Flexibility of Exchange Rates, edited by George N. Halm (Princeton University Press, 1970), pp.115-23.

- 22) J. Marcus Fleming, "On Exchange Rate Unification", Economic Journal, Vol.81, September 1971, pp.467-88.

- 23) W. Max Corden, op. cit.

- 24) Robert A. Mundell, "A Theory of Optimum Currency Areas, American Economic Review, vol. 51, September 1961, pp. 657-65.

- 25) Ibid., pp.662.

- 26) Robert A. Mundell, "The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability", I.M.F. Staff Papers, Vol. 9, March 1962, pp.70-79.

- 27) Peter B. Kenen, op. cit.

- 28) Robert A. Mundell, "A Theory of Optimum Currency Areas", op. cit.

- 29) Yusif A. Sayigh, "The Determinants of Arab Economic Development", (London : Croom Helm 1978).

- 30) J.R. King, Stabilization Policy in an African Setting (Kenya 1963-1973), (London: Heinemann 1979) pp. 36-39.
- 31) See this chapter, pp. 65.

CHAPTER 3

THE DETERMINANTS OF THE SUPPLY AND DEMAND FOR MONEY

i) INTRODUCTION

The aim of this chapter is to analyse the possible causes of the growth of the money supply in Kuwait for the period under study (1963-1981). An important consideration in this analysis is the impact of the role of the commercial banking system and their foreign assets on monetary developments. The high historical levels of foreign assets, in particular of balances with banks abroad, of the Kuwaiti commercial banking system is central to the theme of this thesis which concerns the nature of monetary developments (and monetary policy) in a surplus economy. Despite the importance of bank liquidity in domestic credit expansion, however, the role of government expenditure in the overall monetary picture is found to be equally important, although more difficult to analyse.

We begin this chapter with section (ii) which describes the classical notions regarding money in closed economies, and we try very summarily to discover if there are any ways in which money could be said to be endogenous in the context of the major economies. This discussion will make it easier to move on in section (iii) to discuss some of the issues in the economic literature regarding the monetary experience of developing economies. This will allow us to determine more clearly what the questions are that should be asked in respect of analyzing the peculiar characteristics of a high surplus economy such as that of Kuwait.

ii) THE THEORY OF MONEY AND MONETARY EXPERIENCE
IN DEVELOPED ECONOMIES

"Does Money Matter?" may have been a question misplaced in the debates on the transmission of monetary policy. What should be at stake, in particular among developing countries, is not the effects of monetary policy but the viability of the nominal supply of money as an independent policy tool. The political triumph of monetarism over Neo-Keynesian economics may have given undue credibility to a mechanistic interpretation of the management of the money supply which may have a certain basis in the case of a large and relatively closed economy such as that of the U.S., but cannot possibly do so in the case of small open economies which are the subject of our analysis in this thesis. New questions about the "endogeneity" of the money stock or the extent to which it depends on economic activity have been asked. To study the transmission process of monetary policy is rather futile if the stock of nominal money cannot be considered an exogenous variable in our monetary models. In the words of Phillip Cagan:-

"The observation that changes in the money stock are correlated with both secular and cyclical fluctuations in economic activity is of long standing ... Identifying cause and effect is extremely difficult and hazardous. (An)... approach is to examine the factors affecting the amount of money supplied. The more they reflect fluctuations in business activity, the less reliance can be placed on the importance of money stock effects in explaining observed covariation and conversely." (1)

Milton Friedman and Anna Jacobson Schwartz in their seminal work on the history of money in the United States 1876-1960 propose an archetypal mechanistic view of a monetary system (2). They developed the approach of the "proximate determinants of the nominal stock of money" as their main analytic tool (3). Friedman and Schwartz maintained this approach could explain the irregular long-term growth of the money supply in the United States. The logic of this approach appears to be that central bank liabilities (H) impact on the stock of money (M) according to a simple formula:-

$$M = mH,$$

where (m) is the money multiplier coefficient and where the behaviour of the money multiplier depends on its components:-

$$m = \frac{j + 1}{j + r}$$

where $j = C/D$ (which represents the public's preference for holding cash over deposits) and $r = R/D$ (which represents the banks' holdings of cash reserves against their deposit liabilities). The coefficients (j) and (r) determine, therefore, how much of the stock of what Friedman calls "high-powered money" is in circulation as currency and how much serves as reserves for the multiple creation of deposits by the banking system. High-powered money is the asset counterpart of central bank liabilities and the same symbol (H) is used for both.

Friedman and Schwartz find a close relationship between, on the one hand, secular and cyclical movements in the stock of money and, on the other, corresponding movements in money income and prices. But they

state clearly the problem identified by Phillip Cagan, that a close relation between changes in the stock of money and changes in the economic variables, alone, tells nothing about the origin of either or the direction of influence. But they conclude that monetary developments in the history of the United States have often been independent of changes in business conditions, whereas they show the reverse not to be true although there obviously are interactions:-

"If the predominant direction of influence had been from business to money, these and other changes in the links between business and money would very likely have produced an appreciably different relation between movements in the two before and after 1914, and perhaps also for further sub-divisions of those periods ... while the influence running from money to economic activity has been predominant, there have clearly also been influences running the other way" (4)

Although we use the proximate determinants as a useful heuristic device in our arguments later in this chapter, the behavioural assumptions required for the Friedman-Schwartz model to be an accurate description of fact are rather restrictive, and as we have indicated above may actually be applicable only in a country such as the United States. Before we continue to analyse how developing economies, and in particular small open economies, differ in this respect from the United States, it is just as well that we establish that there is doubt about the applicability of such monetarist models as those of Friedman and Schwartz in the United States and the United Kingdom. We need go no further than to look at the assumptions of the Friedman-Schwartz model.

If economists are to recommend the use of monetary policy to control inflation, high-powered money should be able to be considered as an exogenous policy tool. Specifically the assumptions are that we should expect the monetary authorities are able to influence (H) in the direction they wish, that the behaviour of the coefficient (j) be predictable, and that profit-maximising behaviour on the part of the banks keeps the actual level of the coefficient (r) at or near its legal limit, such that changes in (r) are principally influenced by legislation and not economic activity. What we have called endogeneity of the money supply arises when either of (H) , (j) or (r) are correlated in some way with economic activity, as a result of some or all of the above conditions not being fulfilled. In fact economic thought since 1979 (which has been a period dominated by the chairmanship of Paul Volker at the Federal Reserve Board) has in fact tried to reinstate (H) as an exogenous policy tool.

The ratio of currency to deposits (j) was shown by Friedman and Schwartz to be an important determinant of the money stock in the past, in particular in periods of financial difficulties when the public loses confidence in banks and tries to convert deposits into currency. But they conclude that since the inception of federal insurance on bank deposits in 1934, (j) has not been subject to drastic changes and will not be in the future. It would also seem that in the past the ratio of deposits to reserves (r) has been of importance in periods of financial difficulty. Whenever the public has shown distrust of banks by seeking to lower the deposit-currency ratio (j) , banks have reacted by seeking to strengthen their reserves. Friedman and Schwartz maintain, however, that over the long-term the deposit-reserve ratio has mainly reacted to changes on monetary arrangements:-

"If adjustment is made for changes in legal requirements, the ratio is back to its level of the late twenties" (5)

We shall see in Chapter 4 that generalised money supply theories adopt the behavioural simplifications of Friedman and Schwartz and do not take into account drains of reserves into desired excess reserves at banks (also called secondary reserves), as well as additions to reserves through bank borrowing from the central bank since it is assumed that (r) is at or near its legal limit (6). As we shall see, these criticisms of the simple bank deposit multiplier theories, which have emanated from Friedman and Schwartz, have a direct bearing on the analysis of monetary developments in Kuwait.

There is also a lack of political realism in recognising the complicating relationship between monetary and fiscal policy. The ability of monetary authorities to control (H) is a different question from the observation that historically it may be the major determinant of changes in the stock of money. Political realism is essential in describing the institutional processes in the financial sector of any economy since the observed dependence of (H) in many economies on central bank credit or the public sector borrowing requirement, can so easily lead to its domination by activity in other economic sectors. We have seen, for example, in the case of the U.K., during the period 1979-81, a high degree of money supply growth and high-powered money growth due to the large public sector borrowing requirement (PSBR), in particular due to large advances to the nationalized industries by the Treasury (7). Likewise since money supply targeting by the Federal Open Market Committee (FOMC) began in 1979, the U.S. government has faced the dilemma of a large budget deficit together with the need to reduce

interest rates to encourage economic activity. Such a dilemma should mean that unless money supply growth is running within the target range set by the FOMC, either it would not be able to keep (H) at a level it would consider ideal or economic growth suffers. In other words, if fiscal policy (in particular government expenditure) is rendered inflexible by various political pressures, then in the jargon of the policy-allocation models, monetary policy will be chasing several different goals (8). The implication of these rather simple points is clearly that some doubts can be cast on monetarist models and their explicit or implicit conclusions that high-powered money (H) (and by implication, in the context of these models, the money supply) can be considered an exogenous policy tool.

iii) THE THEORY OF MONEY AND MONETARY EXPERIENCE IN DEVELOPING ECONOMIES

The potential endogeneity of the money supply is rendered even more problematic in developing economies by their rudimentary and inefficient institutional structure. Principally, developing economies are often faced with expenditures on development, crises, or even possibly military adventures far beyond the ability of their internal taxation system or their domestic capital markets to raise funds. The tool of monetary policy in these economies therefore becomes the principal crutch of government and is consequently not only impotently chasing too many goals, but also constitutes a major source of development finance. This dependence of government on central bank advances has led to the well-documented foreign exchange crises, devaluations, trade and exchange controls and inflation, which Harberger sees as the usual result of such policies in developing economies (9).

If we return temporarily to the framework of the proximate determinants approach, high-powered money (H) itself is a sum of separable components just as this approach would have the nominal money stock be. Among these components are some that are influenced by foreign trade and capital flows. On the liabilities side of the balance sheet of a central bank would be currency issued and commercial bank deposits at the central bank, while the assets side would include central bank advances to the government (or government securities) and foreign exchange reserves. This is a simplistic picture but one which is important in our discussions in the coming section which focuses on the vulnerability of small open economies to external shocks. In what follows, it will become clear that the literature on developing economies does on balance see the money stock as endogenous and hence only ascribes certain limited possibilities for the use of monetary policy in these countries.

a) The Impact of the Balance of Payments on the Money Stock of Developing Economies

There are many different types of economic literature which are relevant to the question of the influence of a country's balance of payments on its money stock. We discuss variously:-

- i) Polak-type models,
- ii) policy-allocation models, and,
- iii) the currency-board economy literature.

The three types of literature will make up the raw material of our theoretical analysis in this and the coming chapters, in our analysis of Kuwait which is a small open economy, although not a typical one. We summarize the issues raised in the literature in sub-section (c) below.

J.J. Polak [10] developed a model which can be used to show the dependence of high-powered money (H) on the balance of payments in the case of small open economies. The Polak model basically shows us that long-term money supply growth can only be based on an expansion of international reserves as a result of either increased exports or capital inflows. In this model, an increase in domestic credit expansion in excess of the demand for money will leak out in the long-run in the form of increased imports. In a later article Polak shows that increased capital outflows, resulting from the decline in domestic interest rates associated with money supply expansion, can also represent an important external leak [11]. However, at this point our interest is limited to the broad relationships suggested by this model and to their policy implications. Polak's analysis is set in the context of a fixed exchange regime, where there exists perfect substitutability between domestic and foreign currencies on the supply side.

The orthodox policy-allocation literature [12] constructs a general picture of an economy and discusses, in theoretical terms, assigning policy instruments to that target where they would have a relative advantage. These models are essentially short-term and look at both fixed and floating exchange rate regimes. In both cases the exchange rate is not seen to be available as a policy instrument. Governments are concerned over the level of employment (the internal balance target) and the state of the balance of payments (the external balance target) and have only two instruments at their disposal: monetary and fiscal policy. Although these models are not necessarily concerned about developing economies, one of their assumptions is that the economy in question is a small open economy. The other two major assumptions are

that the current account in the balance of payments is determined only by the level of output and not by the composition of output, and that capital flows are influenced only by relative interest rates. It is actually the nature of capital flows that influences the outcome of the assignment problem in the policy allocation models. If capital mobility is low (in other words its interest elasticity is low) then these models conclude that monetary policy should be assigned to the external target and fiscal policy to the internal target. The reverse is true if capital mobility is high. But what interests us particularly is the work of J. Marcus Fleming. Fleming, in contrast to Robert Mundell, is more concerned that, for a given degree of capital mobility.

"The expansionary effect of a given increase in money supply will always be greater if the boundary has a floating exchange rate than if it has a fixed rate" (13).

In this sense, therefore, Fleming's paper is complementary to the work of Polak, which is concerned with the inability of monetary policy to influence domestic incomes in the long-term if there is a fixed exchange rate.

Where the results of the policy-allocation literature are qualified by the general nature of the assumptions of these models, Polak-type models have more definite and therefore useful results. Such results are only possible because of the greater detail achieved in the construction of the economy we are supposed to be analysing in the Polak setting. The value of these results depends principally upon whether stable parameters for the behavioural equations in the Polak model, in particular the demand for money and the import functions can be

identified from past experience and used with confidence for future prediction in a particular economy. The nominal stock of money in circulation is assumed to be a constant function of income. This is possibly a satisfactory short-term function in particular given the strong evidence that Friedman and Schwartz found for a stable, although cyclical, velocity of money. In sub-section b) below and later on in Chapter 3, however, we shall be discussing the possibility of secular changes in the velocity of money. Certainly in the case of Kuwait we can see a declining if erratic trend in the velocity of money in Table 3:5. The second most important assumption of the Polak model is the stable relationship between imports and income.

We need, however, to look at some empirical research and results on these questions. J.R. King uses the Polak model to test data for Kenya on the period 1963-73 (14). He shows us how a change of policy in 1968 led to expansionary monetary policy which had only temporary beneficial results on economic activity and led to a foreign exchange crisis.

"... credit expansion to the government have only a small and temporary effect upon prices and economic activity. Their permanent effect is upon the foreign reserve position. So if the government sets itself a minimum target for the level of foreign reserves, it is a straightforward matter to calculate the maximum credit expansion that can be sustained" (15)

This bears out some of the more general empirical conclusions reached by J.J. Polak and L. Boissonneault in their empirical tests of the Polak model (16). Polak and Boissonneault found that increases in domestic

credit expansion will lead to an equivalent loss of reserves after three years, and that during that period money will have a temporary effect on nominal income.

The lags discovered by Polak and Boissonneault would imply that it is possible to use monetary policy in a contracyclical sense, to offset the temporary effects of changes in the external balance on the nominal income of a small open economy. J.R. King, in his study on Kenya, does reach the conclusion that given the minimum target for foreign exchange reserves that is stipulated in the Central Bank of Kenya Act, the only safe rule for credit expansion in the long run is that none at all should be undertaken. This conclusion naturally has to be read in the context of a constant velocity assumption. It also ignores the possibility of credit expansion accompanying a rise in international reserves. Nevertheless, he does point out very clearly that this conclusion does not rule out the possibility of using credit expansion as an anti-cyclical device, with any borrowing in a recession being fully repaid in the recovery phase of the cycle.

The role of contracyclical monetary policy has been discussed in the economic literature in the context of colonial or "currency-board" economies. A pure currency-board economy is one where there exists a one hundred per cent note issue cover rule which by definition prevents foreign exchange crises at the expense of fluctuations in the country's nominal income. Most of the discussions about currency boards take place in the context of small open economies, although certainly not all. The problems of the Indian monetary system in the nineteenth century which we touched on briefly in Chapter 1 is an example of an exception. A great deal of research is available, however, on Malaya and Singapore which is relevant to the small open economy. The case of

the small open economy attracts our interest due to its direct relevance to the structure of Kuwait's economy. The currency-board system involving the hundred per cent note issue cover rule was the system of monetary management widely applied in the colonies of the British Empire during the nineteenth and early twentieth centuries. Arthur Hazelwood discusses this system and says that:-

"Local currency, such as West African pounds, Jamaican pounds, or Malayan dollars, is issued by a currency authority in exchange for sterling at a fixed rate. The currency authority also stands to pay out sterling in exchange for local currency at the same rate" (17)

The proportion of reserves that were held as sterling assets as opposed to being invested in gold, increased in most of the colonies and protectorates of Britain throughout the nineteenth century.

Research on Malaya and Singapore has shown, however, that contrary to expectations a high correlation between the balance of payments and the money supply that is the normal result of strict currency-board type monetary management has never held in the short-term. Wong's model of Singapore's monetary sector shows us for instance that the correlation between the balance of payments and domestic credit expansion depended on the behaviour of the banks (18). Betz deals with this problem in more detail in his study of Malaya and Singapore (19). He demonstrates that the correlation between the balance of payments and money supply need not hold at all in a currency-board economy because of variations in the behavioural functions that determine the money multiplier. In our discussion of the proximate determinants these behavioural functions

were represented by the coefficients (j) and (r). More specifically therefore in the case of Malaya and Singapore, Betz pointed out that the coefficient (r) or the bank reserve ratio and foreign exchange holdings of the commercial banking system could be manipulated by the foreign banks, which dominated the banking system.

Drake also discusses the behaviour of foreign banks in currency-board economies but in a more general sense (20). He saw that it was quite possible for such banks to extend credit irrespective of the foreign exchange holdings of the currency-board of the country in question. In his research on Malaya and Singapore, Drake states that:-

"The prime factor in money creation under the Malayan system has historically been the balance of international receipts and payments ... But this is not the whole story. The money supply is neither 100 per cent backed by foreign assets nor does it represent a cumulated balance of payments surplus, because of the domestic lending activities of the commercial banks" (21)

However, he recognises that, in general, foreign banks would only extend credit to foreign enterprises. These enterprises, however, would historically have been concentrated in the foreign trade sector of the country in question, and therefore their credit requirements would be positively correlated with the balance of payments. Again in the case of Malaya and Singapore:-

"In theory there is no reason why the expatriate banks could not draw sterling reserves into the

system by borrowing from their London offices" (22),

and

"the lending of expatriate banks was positively correlated with the profitability of international trade" (23).

Much more recently in the case of Liberia, Geoffrey Maynard has shown similar results and seems to have a very good reason why foreign banks do not play an important part in financing deficits and surpluses in the Liberian balance of payments:-

Foreign owned banks which may be strong enough to bear the losses arising in operations in small countries like Liberia have to take account of the interests of their shareholders" (24)

We saw clearly in Chapter 1 in the case of Iraq and Kuwait that the foreign banks would only lend to the trade sector and we stated evidence of this (25). The sarrafs (or money-changers) who did give credit internally in Iraq and the Persian Gulf countries were an insignificant factor compared to the foreign banks. Drake and others have also seen this in the case of most colonial territories and protectorates:-

"Banking business in the colonial territories is dominated by branches of expatriate banks" (26)

It has been maintained that the currency-board system, operated by Britain in its colonies and protectorates was deflationary. Hazelwood

claims that:-

"It is understandable that colonial governments should see an advantage in having an assured income from Sterling securities instead of the promise of local development ... But while such an attitude is understandable, it is not necessarily correct. The situation could, perhaps, be interpreted as one where a divergence exists between the "private" and the "social" benefits of economic development and in which governments are motivated by "private" criteria. If in fact no such divergence exists, and if it is in the "social" interest of a colony to invest its surplus funds in sterling, it surely follows that the colony is not in need of capital from abroad" (27)

Drake discusses the advantages of the currency-board system. It would seem to allow a country the enjoyment of the symbolic value of its own currency and to avoid the opportunity cost associated with the use of another currency which we saw in our discussion of seignorage in Chapter 2. The inhabitants of a particular country now hold local notes and coin and the board holds the foreign currency, which has been earned by the net export of goods, services or property rights, ie. by a balance of payments surplus. But whereas the local population would hitherto have held physical foreign currency that earned no interest, the currency-board need not do so. It would appear to have sufficed for the currency-board to have held something like one third of the currency backing in liquid assets against conversion contingencies (28). But

Drake then goes on to agree with Hazelwood that currency-board economies of the most rigid form have many disadvantages, in particular that the monetary authorities cannot direct the currency reserve into local asset formation but instead must be held in the form of foreign reserves. Other related disadvantages would seem to be that contracyclical monetary policies cannot be engineered by any discretionary creation/extinction of money via the currency-board. Secondly, the system suffers from a built-in deflationary bias whenever the output of the economy expands without any simultaneous improvement in the balance of payments. Finally, the fixed exchange rate embodied in the currency-board system limits the scope for fending off price changes originating abroad.

Grove and Exeter discuss the case of the Philippine Central Bank Act of June 15, 1948, when the hundred per cent note cover rule was abolished and a new flexible rule voted in. This was an important example of the end of a currency-board system and the creation of a new independent central bank. The reason for this legislation in the Philippines was, in their own words:-

"to accommodate the credit needs of a vigorously growing economy" (29).

But although an independent central bank may select its own assets, create money without limit by buying local securities or making advances, hold all the national stock of foreign exchange, and control the nation's exchange rate by buying and selling foreign currency as a monopolist, we have seen in the research of J.J. Polak and J.R. King that the balance of payments remains an important constraint on the operations of such a central bank, should its intentions be to use

management of the money supply to affect the level of output and employment in a country.

Drake discusses how in developing economies today, given the constraints established by the research of J.J. Polak and J.R. King, central banks can be made to offset temporary negative effects of the external balance on the economy and to overcome the deflationary bias of the rigid currency-board regime. He considers it must be obvious that for many countries neither extreme rigidity nor total discretion on the part of the central bank is appropriate and that some compromise is the best solution. His idea of allowing monetary policy to deviate from the hundred per cent note issue cover rule by allowing the monetary authorities to issue notes against the creation of domestic assets, thereby inducing domestic credit expansion in times of negative developments on the external front, would allow domestic credit expansion to offset the impact of the balance of payments on the money supply, and therefore on nominal income. In line with Polak and Boissoneault's research [30] Drake emphasises that such policies can only be useful in the short-term:-

"It is not sufficiently appreciated that some anti-cyclical monetary policy is possible even in a currency board country. The link between external reserves and money makes counter-cyclical monetary policy difficult but not impossible". [31]

b) The Relationship Between Money Supply and Growth in Developing Economies

A large literature has grown up placing a great deal of importance on the role of money and monetary policy in the growth process. This

literature has focused on the equilibrium interest rate in a developing economy, but chiefly in capital-scarce, high population developing economies. The notion of an equilibrium interest rate in a high-surplus, low population economy, such as that of Kuwait is not of concern in this literature although it may be of indirect relevance as we shall see later. As we pointed out above, the poor resources of governments in developing economies which are too weak to use taxes to generate a surplus, has made monetary policy their principal crutch (32). In a kind of sympathy with this state of affairs, the "inflation tax" literature promotes the idea of deficit financing for development expenditure and is quite well established (33). Meanwhile, Newlyn has argued for the relative efficiency of such deficit financing in developing economies (34). However, the relatively more recent so-called "financial repression" literature points out the costs of pursuing such policies (35). This conflict of views over the costs and benefits of inflation for a developing economy is based on different theoretical approaches to the problem. In particular, the usual neo-classical approach to growth in developing economies fails to see the correct relationship between physical and financial assets in a developing economy, and the fact that real money balances are an important input in the production function of an economy (36). The financial repression literature sets out to try and redress this.

E.S. Shaw has written that part of the success of the South Korean economy in the 1960's, which was a decade of fundamental transformation for that country, was due to using the domestic capital markets as an engine of growth. This had involved releasing the banking system from previous restrictions and allowing interest rate to rise to unprecedented levels (37). Gurley and Shaw showed that what matters for development is the existence of channels through which the resources of

surplus units are transmitted to the highest yielding investments (38). McKinnon developed a model of growth where money and capital-formation are shown to be complementary rather than competitive as in the neo-classical models of growth (39). Using Gurley and Shaw's concept of "inside money" McKinnon explained that the money stock is a liability of the banking system, and is lent out by banks to deficit units in the economy. It cannot only be considered uniquely as an asset or "outside money", which is important in assessing the importance of real money balances as an input in the production function of the economy. Khathkate (40) and Thirlwall (41) also discuss the same problem in different terms, and coined the phrase that money serves as a "conduit", where, since investment in machines is, by its very nature, lumpy, it requires the accumulation of money balances over time to precede the act of investment.

The implication of all this is that lower interest rates, either through regulation or an expansionary monetary policy are not necessarily an encouragement to increased capital investment. The conduit models show that the monetization of a subsistence economy would allow the vicious circle of self-financing to be broken. As an economy expands, personal contacts are no longer the basis for investment and informal or direct forms of lending and borrowing are substituted by indirect forms involving the use of money. Replacement of direct lending by bank intermediation raises the ratio of money to the national income and therefore money creation itself is the channel for savings which Gurley and Shaw indicated to be crucial for development.

Empirical evidence tends to support this thesis:-

As regards the neoclassical prediction that an

increase in the money-income ratio will reduce capital-intensity and output growth rate, it can be mentioned that the empirical evidence suggests the opposite; the relationship between the savings ratio and the money-income ratio in the long run is found to be positive" (42).

However, the fundamental argument here is that real resources freed by the replacement of direct lending by bank intermediation, reflects the real quantity of money held and cannot be forced by the monetary authorities simply supplying more nominal money. The accumulation of money balances by savers therefore would seem to depend on the real interest rate (a product of the rate of inflation and nominal interest rates) and such money balances should, according to these models, be allocated by the banking system to the highest yielding projects such that funds are efficiently employed. The implications of this literature are far-ranging, but in the context of our discussions here, the main conclusion is that monetary authorities in developing economies should avoid inflationary expansionary monetary policy based on government or public sector borrowing from the central bank. Therefore, apart from the considerations in sub-section a), the long-term goals of non-inflationary economic growth would therefore seem to form a further major constraint on the use of monetary policy in the control of the level of output and prices.

c) A Theoretical Summary of the Question Relating to Small Open Economies

The aim of this sub-section is to crystallize the main concepts developed throughout this section (iii) in symbolic form and to build an

intelligible link between the theory on the monetary experience of the developing economies, in particular of small open economies, and the ensuing analysis of Kuwait's monetary system.

The standard national income identity is:-

$$Y \equiv C + I + G + (X - M)$$

where Y = value of output

C = consumption

I = investment

G = government absorption of goods

X = value of exports

M = value of imports

Sometimes it is the aggregate spending by domestic residents which is emphasised rather than the components of demand such that:-

$$E \equiv C + I + G$$

where E = absorption by domestic residents

so we can redefine Y such that:-

$$Y \equiv E + (X - M)$$

At this point we need to look carefully at what we mean by the value of output. Gross National Product (GNP) is the income received for productive activity by domestic residents and Gross Domestic Product (GDP) is the value of output domestically produced. The difference between the two corresponds to net factor payments from abroad, which correspond primarily to income from capital (interest and dividends) and to labour income accruing to domestic residents from abroad. In the case of Kuwait we use GDP due to the high level of repatriation of

earnings by foreign labour in the country and the importance of investment income to the country. In fact, it has become almost standard practice in empirical tests of developing economies to use GDP rather than GNP, although the reasons for doing so in the case of Kuwait do not apply to many other countries.

Two important sectoral balance identities can be derived from the national income identity:-

$$Y - E \equiv X - M$$

where the surplus of production over expenditure must be equivalent to the surplus on the balance of trade and,

$$(S - I) + (T - G) \equiv X + K - M$$

$$\text{where } S \equiv Y + K - T - C$$

$$T = \text{net taxes}$$

$$K = \text{net international transfers.}$$

This identity says that the surplus on the current account of the balance of payments must equal the surplus of private saving over investment and the government budget surplus. It does not require a leap of the imagination to deduce that the current account indicates the rate at which the economy in the aggregate is adding to its net external assets, such that:-

$$(S - I) + (T - G) \equiv \Delta NFA$$

$$\text{where } \Delta NFA = \text{total net foreign assets of the banking system}$$

Net foreign assets is the point where we can start looking at the monetary relations of small open economies. Clearly the total money supply in an economy equals claims of the banking system on the rest of the world plus claims on the domestic private sector:-

$$M2 = NFA + DA$$

where $M2$ = broad measure of the supply of money

DA = total domestic assets of the banking system

This leads us to J.J. Polak's major contribution (43). This contribution was, quite simply, that in open economy monetary accounting, the banking system acquires external assets as the balance between monetary expansion and domestic credit expansion. Therefore, changing the above identity around and taking first differences we get:-

$$\Delta NFA = \Delta M2 - \Delta DA$$

Domestic credit expansion can be sub-divided into claims on the government and claims on the private sector:-

$$DA = DA_G + DA_P$$

where DA_G = claims on the government by the banking system

DA_P = claims on the private sector by the banking system

The deficit in the government budget can therefore be expressed as follows:-

$$G - T = \Delta DA_G - \Delta NFA_G$$

which can give us therefore,

$$\Delta NFA = (T - G - \Delta NFA_G) + (\Delta M2 - \Delta DA_P)$$

An increase in external assets would seem to be equivalent to an increased indebtedness of the private sector or a government budget deficit financed by the domestic banking system.

It is time to look at monetary relations in a small open economy in a less mechanical manner, and perhaps to establish some behavioural relations. In our discussion of currency-board economies (44), we were looking at an economy with a fixed exchange rate, where the money supply

was determined by the balance of payments, represented by changes in the level of net foreign assets, and domestic credit expansion. In a strict, but possibly unrealistic, currency-board economy, the hundred percent note cover rule in a specie economy would imply that $\Delta DA = 0$. In a more advanced monetary economy with banks and local lending, this is not the case, but it is argued that ΔDA is correlated closely with ΔNFA , since NFA represents the reserves of the banking system under the hundred per cent note cover rule.

Wong (45) and Betz (46) argue, however, that in the case of Malaya and Singapore ΔDA and ΔNFA empirically do not seem to be moving in any related fashion. We have seen that there are some arguments to the effect that domestic credit expansion could take place without the need for an expansion in NFA , and other arguments, such as that foreign banks would only lend to trade-related activity, which would justify the thesis that ΔDA and ΔNFA were correlated, in the traditional currency-board economies. If this was the case then money supply would contract considerably if trade contracted. But we have seen also that independent central banks can play a stabilizing role by making ΔDA offset any ΔNFA (47). Polak and Boissoneault (48) have estimated that it would take three years for ΔDA to have an exactly opposite effect on ΔNFA . Given these lags, it was concluded earlier, that monetary policy should be able to be used in a contracyclical sense to offset the effects of the balance of payments on nominal income in the short-term, even if there does exist a rigid link between external reserves and money supply under the hundred per cent note issue cover rule. Clearly even an independent central bank, however, is restricted in the possible success of its monetary policies.

In the case of Kuwait the high external surplus has allowed the country

to run the hundred per cent note cover rule, without many adverse effects. In addition the banking system is independent and as we shall see, there has been little relationship between domestic credit expansion and net foreign assets.

An issue of importance in looking at a monetary system in any developing economy is the relationship between the central bank and the commercial banks. Clearly the expression:-

$$\Delta NFA = \Delta M2 - \Delta DA,$$

can be split up into the components belonging to the central bank and those belonging to the commercial banks such that:-

$$\Delta NFA_{CB} + \Delta NFA_B = \Delta H + \Delta D - \Delta DA_{CB} - \Delta DA_B$$

where the subscript CB = central bank

the subscript B = commercial banks

H = high powered money

D = deposits of the banking system

As we have seen (49) in a classical closed economy model we can characterize the determination of the money supply as follows:-

$$H = C + R$$

C = currency in circulation

R = bank reserves

The money supply is linked to high-powered money via the money multiplier (m):-

$$M2 = m H$$

$$\text{where } m = \frac{j + 1}{j + r}$$

where $j = C/D$

$r = R/D$

D = total deposits of the banking system

By controlling its liabilities, assuming that they correspond reasonably closely with the assets of the commercial banks, in other words that the central bank can control the reserves of the commercial banks, the central bank could then control domestic credit expansion and therefore the money supply. In the open economy, if foreign exchange holdings are centralized with the central bank and $NFA_B = 0$, the central bank may not be able to influence H in the direction it wishes in order to carry out its monetary policy due to unexpected changes in NFA_{CB} . If foreign exchange holdings are not centralized with the central bank, as in the case of Kuwait, then the supposed link between high-powered money (H) and $M2$ is more tenuous. Also if bank reserves under the control of the central bank (R) are very small relative to other reserves, such as liquid foreign assets, as is also the case in Kuwait, the link may be even more tenuous.

As we saw at the beginning of this section, the debate, "does money matter?" between the Keynesians and Monetarists concentrated on the demand for money function, rather than, as we indicated might have been more realistic, on the problems of using monetary policy in a small open economy. The monetarist function is used in most Polak-type models:-

$$M2 = k Y$$

this constant velocity assumption is based on the Milton Friedman empirical results showing stability in the demand for money, and the consequence of this is that it is possible to predict the effects of changes of the money supply on total expenditure and income. Certain results for Kuwait show high interest inelasticity of the demand for money (50), although our estimates for the velocity of money in Kuwait, which show a high degree of instability, cannot be relied upon due to

the difficulty of calculating accurate GDP figures.

The external leak that domestic credit expansion causes in order to have a negative impact on net foreign assets, takes place through a rise in imports and possibly also increased capital outflows. The import function used in Polak-type models is:-

$$M = z Y$$

so that imports are an increasing function of income. Generally speaking the corresponding balance of payments function is written such that:-

$$NFA = X - M + \bar{K}$$

where the bar on top of K indicates that capital flows are assumed to be exogenous. It will be considered, later on in the analysis, whether it would be better to make capital flows interest sensitive. In the case of Kuwait, however, as we shall see (51), rigid domestic interest rates means that what part of capital flows is interest sensitive depends on external interest rate developments. Consequently, the assumption that capital flows are exogenous is kept.

In the fixed-exchange rate regime of Polak-type models, exports are assumed to be exogenous. J.R. King, however, develops a Polak-type model which also develops the relationship between the effective exchange rate and the equilibrium level of domestic prices (52). In this model the effective exchange rate becomes a useful policy tool, since the price of goods absorbed domestically depends positively on prices in world markets, and inversely on the effective exchange rate, where the exchange rate, is fixed exogenously by the monetary authorities. As we shall see in Chapter 6, a fixed exchange rate is a difficult concept to grapple with and that in the experience of Kuwait, although the Kuwaiti

Dinar has been extremely stable vis-a-vis the U.S. dollar, it has not been as stable when measured in terms of any of the definitions of an effective exchange rate.

iv) THE DETERMINATION OF THE MONEY STOCK IN KUWAIT AND THE "PROXIMATE DETERMINANTS" APPROACH OF FRIEDMAN AND SCHWARTZ

The previous section outlined some of the problems connected with the theory of money and in particular as it relates to developing economies. The problem of endogeneity was outlined and its consequences for policy in those countries. The claims of Friedman and Schwartz regarding the role of high-powered money in the determination of the money stock and regarding the ability to use monetary policy in general may be limited to the case of the United States and be totally irrelevant in the case of small open economies. Some of our discussions above have indicated that even in the case of a largely self-sufficient economy such as that of the United States those claims may still not be true. This section will try to assess what it is that determines the money supply in Kuwait, and will begin by analysing the methodology and the statistical problems connected therewith.

a) The "Proximate Determinants" Approach

The proximate determinants approach developed by Milton Friedman and Anna Jacobson Schwartz that we have already briefly perused (53) is a useful heuristic framework for the analysis of the behaviour of the stock of money in an economy. This approach involves partitioning changes in the series for the stock of money (M) between three different explanatory factors:-

1. the public's cash preference ratio (j),
2. the banks' reserve ratio (r),

3. and high-powered money (H).

The approach first developed by Friedman and Schwartz was adapted by Betz (54) and Cagan (55) to be used for generalized empirical tests. For our purposes we use Cagan's methodology (56). Cagan's algebra differs from that of Friedman and Schwartz only marginally. From the equation:-

$$H = C + R$$

Cagan derives:-

$$\frac{H}{M} = \frac{C}{M} + \frac{R}{D} - \left(\frac{C}{M} \cdot \frac{R}{D} \right)$$

where R = bank reserves
C = currency in circulation
D = deposits of the banks
M = money supply

which shows the change in money supply directly attributable to each of the three proximate determinants.

Betz uses the Friedman and Schwartz equation (57):-

$$\frac{M}{H} = \frac{C/D + 1}{C/D + R/D} = \frac{j + 1}{j + r}$$

which expression, after natural logarithms are taken, is transformed such that:-

$$\ln M = \ln H + \ln (j + 1) - \ln (j + r)$$

This expression has to be expanded in order to enable us to isolate the three separate terms, two for the contributions of each of (j), (r) and another term representing their interaction. Cagan's algebra approaches the problem differently and organises the appropriate terms from the outset as we have seen. His original expression is then made to describe the rates of change of the variables by first taking natural

logarithms:-

$$\ln M = \ln H - \ln \left[\frac{C}{M} + \frac{R}{D} - \left(\frac{C}{M} \cdot \frac{R}{D} \right) \right]$$

or using coefficient forms:-

$$\ln M = \ln H - \ln(c + r - cr)$$

and then differentiating with respect to time:-

$$\frac{d \ln M}{dt} = \frac{d \ln H}{dt} + \frac{M}{H} (1 - r) \frac{d(-c)}{dt} + \frac{M}{H} (1 - c) \frac{d(-r)}{dt}$$

The factors:-

$$\frac{M}{H} (1 - r) \text{ and } \frac{M}{H} (1 - c)$$

in the second and third terms can be approximated by using their average values over each period for which the rates of changes are computed, or by calculating average values at the beginning and the end of each period. Although this latter method does expose us to an "error" term, we found it small and insignificant in the case of the monetary series in Kuwait 1962-81, and we consequently adopted this procedure. The "error" term can be seen in Table 3:1 and is the difference between the first column (LNM2) and the second (EST. LNM2).

The terms:-

$$\frac{d \ln M}{dt}, \frac{d \ln H}{dt}, \frac{d(-c)}{dt}, \frac{d(-r)}{dt}$$

are approximated for a finite period by numerical changes in $(-c)$ and $(-r)$ and in the natural logarithm of (M) and (H) (such that the rates of these latter two variables are made to compound instantaneously).

It is important that we use the rate of change in the money stock and

TABLE 3.1

THE PROXIMATE DETERMINANTS OF THE MONEY SUPPLY 1963-H1
- THE ESTIMATES AND THE EQUATIONS

$\Delta \text{LN}M2$	$\Delta \text{EST. LN}M2 (*1)$	$\Delta \text{LN}H'$	$M2/H'$	R'/D	$\Delta C/M2$	$c (*2)$	$M2/H'$	$C/M2$	$\Delta R'/D$	$r' (*2)$
1981	0.26208	0.26206	0.26801	0.35960	-0.00983	0.01536	2.43946	0.078560	0.00948	0.02131
1980	0.14084	0.14078	0.12731	0.37383	-0.00166	-0.00242	2.32886	0.08877	-0.00521	-0.01106
1979	0.14220	0.14179	0.12532	0.36375	-0.00077	-0.00116	2.35827	0.09468	-0.00717	-0.01531
1978	0.19070	0.19203	0.07335	0.46241	-0.00870	-0.00918	1.96343	0.09511	-0.0954	-0.16950
1977	0.18768	0.18763	0.22284	0.45755	-0.00900	-0.00954	1.95470	0.09981	0.02543	0.04475
1976	0.23555	0.23934	-0.04293	0.48933	-0.00435	-0.00416	1.87314	0.10797	-0.16633	-0.27792
1975	0.23650	0.23656	0.16281	0.69087	-0.00827	-0.00352	1.37681	0.11826	-0.05785	-0.07023
1974	0.17221	0.17224	0.11969	0.76737	-0.00878	-0.00257	1.25926	0.11777	-0.04499	-0.04998
1973	0.11377	0.11561	-0.10885	0.84831	-0.00539	0.00095	1.16768	0.12163	-0.21977	-0.22541
1972	0.13145	0.13148	0.06710	1.00732	-0.01094	0.00008	0.93484	0.12115	-0.07373	-0.06448
1971	0.11387	0.11982	0.11574	1.04013	0.00055	-0.00002	0.96542	0.12010	-0.00478	-0.00406
1970	0.04697	0.04698	0.08991	1.01148	-0.00914	0.00010	0.99046	0.12840	0.04964	0.04285
1969	-0.03659	-0.03658	-0.05289	0.88969	-0.00605	-0.00074	1.10785	0.11825	-0.01593	-0.01556
1968	0.17458	0.17459	0.14981	0.91111	-0.02597	-0.00250	1.08368	0.13463	-0.02376	-0.02228
1967	0.04548	0.04744	0.04045	0.96249	0.02188	0.00085	1.03331	0.15231	-0.00895	-0.00784
1966	0.29470	0.29471	0.28900	1.00110	-0.02016	-0.00003	1.00110	0.15490	-0.00671	-0.00568
1965	0.05181	0.05181	0.08404	0.99925	-0.00303	0.00000	0.99925	0.15019	0.03796	0.03223
1964	0.13234	0.13227	0.21100	1.02196	-0.03116	-0.00079	1.02196	0.16102	0.09274	0.07952
1963	0.00451	0.00452	-0.02353	0.95081	-0.01208	-0.00062	1.04252	0.17496	-0.03189	-0.02743

(*1) calculate from equation: $\Delta \text{LN}M2 = \text{LN}H' + \frac{M2}{H'} + \frac{1-R'}{D} \cdot \left(\frac{M2}{D} \right) - \frac{C}{M2}$
 $\Delta \text{LN}M2 = \text{LN}H' + \frac{M2}{H'} + \frac{1-C}{M2} \cdot \left(\frac{R'}{D} \right) - \frac{DI}{M2}$
 LN M2 = Natural Logarithm of M2
 H' = High Powered Money Adjusted for Net Foreign Assets of the Commercial Banks
 R' = Bank Reserves Adjusted for Net Foreign Assets
 D = Total Deposits of Residents
 C = Currency Outside Banks
 c = Second Term of equation for LN M2
 r' = Third Term of equation for LN M2

(*2) change direction of sign for calculations

high-powered money, and therefore that we employ natural logarithms, rather than their respective quantities. The reason for this is that, in the context of the monetary series for Kuwait 1962-81, the extraordinary uptrend in quantities over the period tends to obscure short-term fluctuations. Our proposed methodology completely neutralizes this factor. The contributions of the three proximate determinants to the determination of the money supply in Kuwait over the period 1963-81 are calculated in sub-section (c) in this chapter. Before going on to this, however, it is necessary to establish the nature of the data we should be using for high-powered money (H) and bank reserves (R).

b) Monetary Series for Kuwait 1962-81 and the Importance of Foreign Assets as Bank Reserves

The Central Bank of Kuwait provides monetary data to the International Monetary Fund (IMF) on a quarterly basis, and the IMF publishes this data in a form which is widely used throughout the world. If the two identities are considered which form the basis of the IMF monetary statistics (in their publication 'International Financial Statistics' (IFS)) we have the following two basic expressions:-

$$H = C + R$$

$$M = C + D$$

where H = "Reserve Money" (Row 14)

C = "Currency outside Banks" (Row 14a)

R = "Reserves" (Row 20)

The row numbers beside each variable indicate where they are placed in the most recent publication of IFS and the names are those used in the IFS. The first two variables (H) and (C) come under the heading of "Central Bank" and the last under the heading of "Commercial Banks". (D) represents total deposits but appears in the IFS as divided between

"demand deposits" and "time and savings deposits".

At first sight the standard nature of the above expressions raises no alarms. However it will become clear that should one follow these categorisations and the approach of IFS to Kuwait's monetary series in the period under study, it would be impossible to catch the essentials of the workings of the Kuwaiti monetary sector.

We have to ask what kind of economy Kuwait became after the discovery of oil. As we saw in Chapter 1, the establishment of banks in Baghdad and Basra from 1890 and of a branch of the Imperial Bank of Iran in Kuwait in 1942 meant that domestic credit creation became a factor in the determination of the money supply. We discussed the behaviour of British banks in the colonies which we saw were the dominant factor in the monetary sector of these economies (58). These banks would have been able to vary their local liabilities according to the general liquidity of the bank as a whole, without necessarily referring to any internal country limits (59). We saw, however, that their lending would have followed the fluctuations in foreign trade. Drake (60) showed that British banks tended to in general restrict their lending activities to foreign enterprises with strong bias towards trade and reports by British Naval Intelligence confirmed this in the case of Iraq and the Persian Gulf countries (61). Before 1961 in Kuwait, there was little activity outside the oil sector and most of the activity of the Imperial Bank of Iran (later the BBME) centered on this sector (62).

The establishment of the Kuwait Currency-Board in 1960 did not change the monetary regime a great deal (63). As a currency-board economy the money supply and nominal income in Kuwait would have varied with the balance of payments, not least because of the nature of colonial banking

we described above, but also clearly because of the nature of currency-board management of the currency. The hundred per cent foreign exchange cover was still applicable to the country's new domestic currency in 1961 (64). However, Kuwait was rapidly developing an independent banking system. This process began with the establishment of the National Bank of Kuwait in 1952 and culminated in the nationalisation of the British Bank of the Middle East in 1971 and the total prohibition of foreign banking in the country (65).

The independent locally-controlled banking system that grew between 1952 and 1971, clearly had different goals to the foreign banks. National banks led to rapid growth of internal financing:-

"Instead of accumulating more cash to finance its growing transactions, the private sector relied on the banking system to provide for its financial needs, and invested abroad more of its liquid resources" (66)

But ironically these national banks were in principle in a similar relative position to the local economy as the British banks used to be. The reason for this is that their large foreign exchange reserves gave them independence from the local monetary authorities, and the ability to expand domestic assets at will. The economy's surplus gave the central bank no motive for claiming a monopoly on foreign exchange dealing. On the contrary the government approved the growth of the national banks which included:-

"... banning the operation of foreign banks ... and concentrating on developing large and powerful

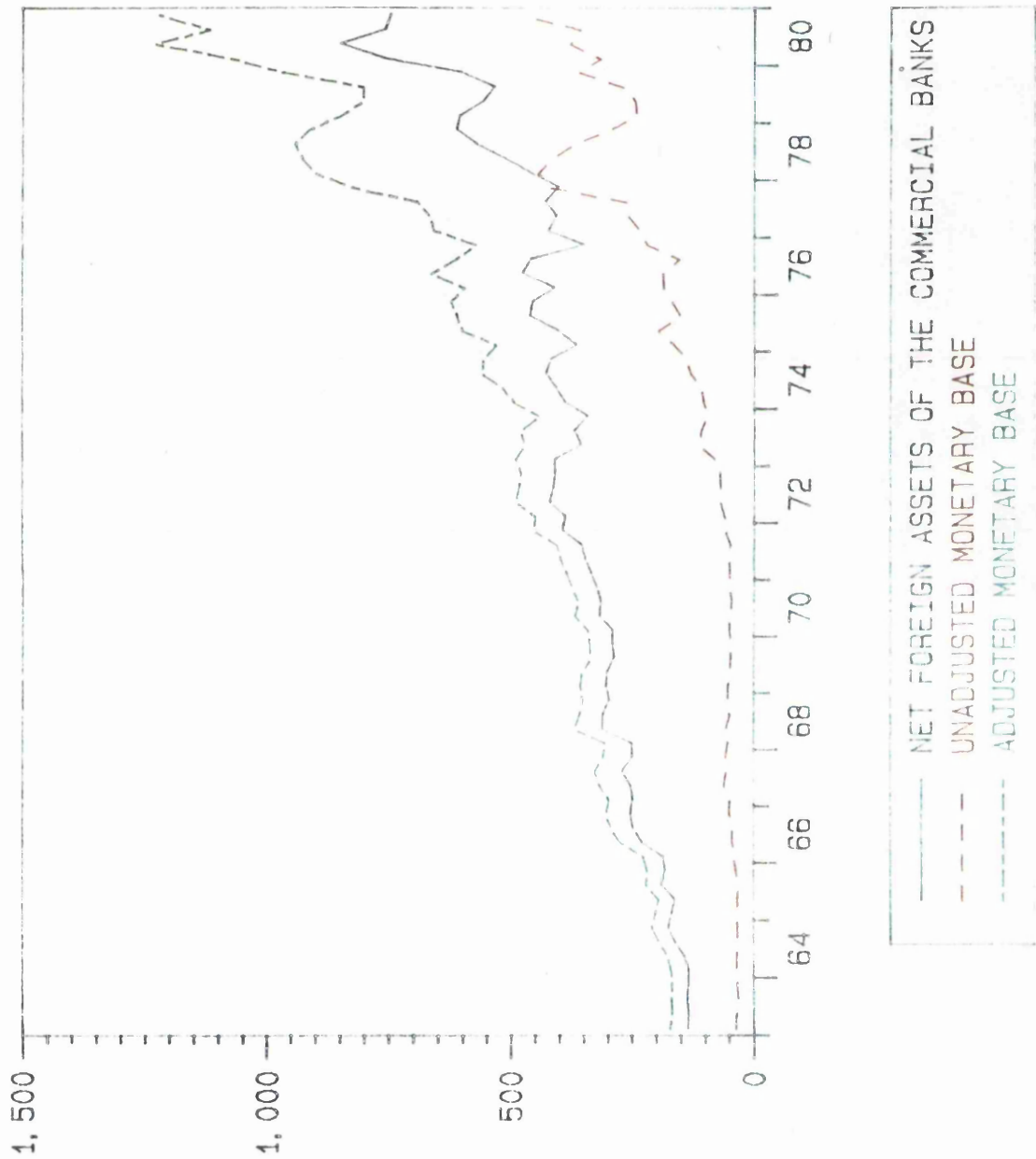
national financial institutions which will handle the placing and investment of its own enormous funds abroad" (67)

Again in the language of the Polak model (68), despite the fact that domestic credit expansion (ΔDA) would tend to lead to an equivalent and opposite change in reserves (ΔB) within a period estimated to be three years (69), so long as B is positive a positive ΔDA is possible. In the case of Kuwait B has historically been high enough in the period under study to allow a positive ΔDA far in excess of the needs of the deficit sectors of the economy. This particular situation has naturally meant that to expect any kind of correlation between ΔDA and ΔB or between the money supply and the balance of payments is meaningless. As we shall see later the banks in Kuwait responded to an increase in loan demand which was not connected with the trade sector (70).

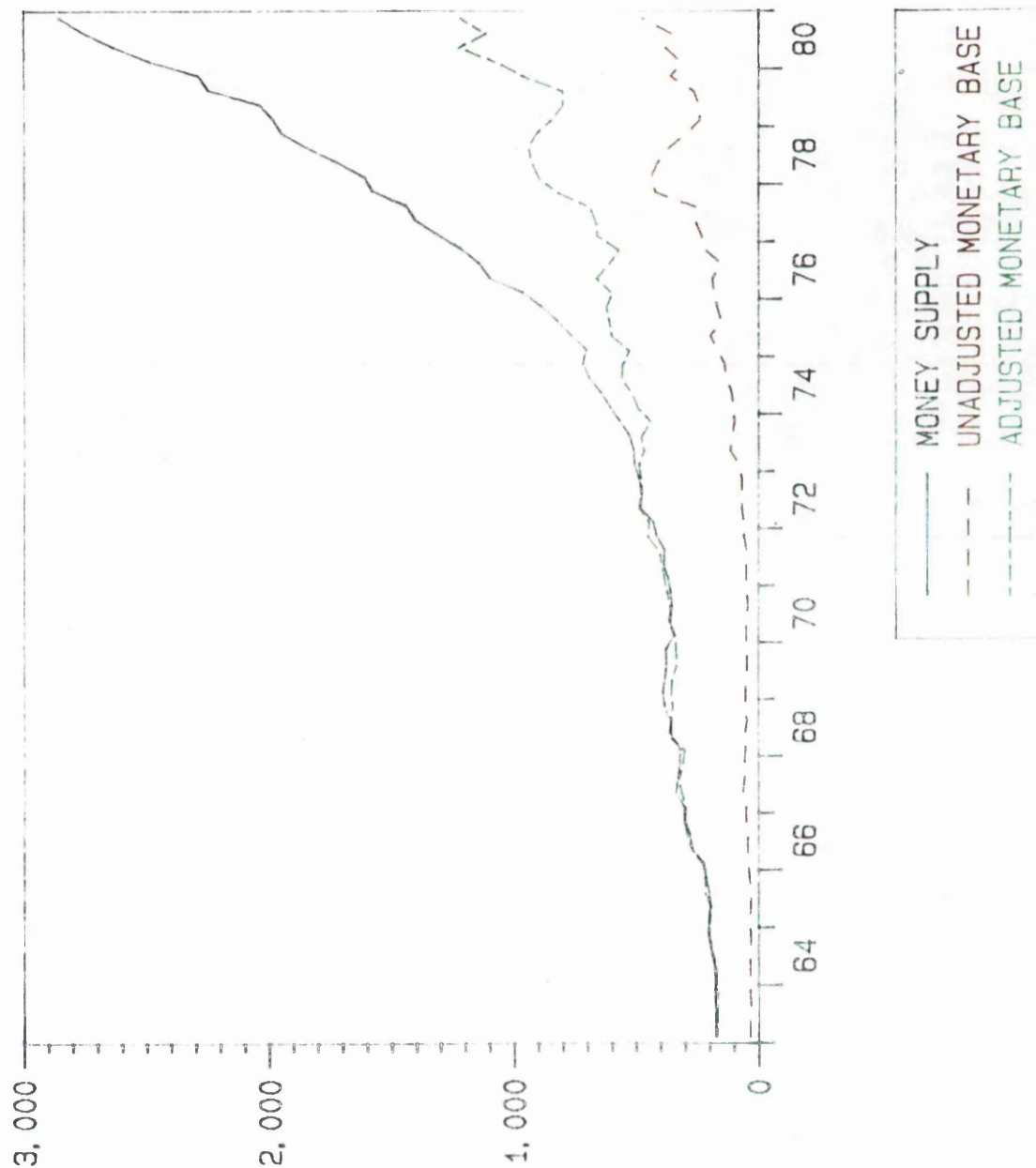
The high level of government expenditure, the availability of foreign exchange reserves at the central bank and the lack of internal investment opportunities compared with the liquidity generated by government expenditure in the economy at large, led to a high level of foreign assets in the balance sheets of the commercial banks. The banks ability to lend were far beyond the needs of the country's deficit sectors. In Chapters 4 and 5 it will become increasingly apparent that the implications of such a situation has made the central problem of the management of Kuwait's economy one of control of excessive credit and consequent speculation and inflation. Further implication of this capital plenty nature of the Kuwaiti economy is that the "financial repression" and "conduit" literature discussed earlier may not be applicable in the case of an analysis of the Kuwaiti monetary sector(71).

As we saw earlier, the monetary concept at the base of these theories is that money balances are not a competing factor against capital investment in all kinds of economic environment, but certainly in fragmented and unsophisticated economies, money balances are complementary to capital investment. The equilibrium rate of interest is therefore a central concept of monetary management in developing economies, or should be, according to these theories. McKinnon has an expression for the real return on holding money, $d - \dot{P}^*$, where \dot{P}^* is the expected future rate of inflation. He further considers that the monetary authorities in any developing economy can control (d) and the rate of expansion of nominal cash balances, \dot{M} . \dot{M} in his model eventually determines the actual and ultimately the expected rate of change in the price level, and the authorities are supposed, therefore, to be able to set $d - \dot{P}^*$ at whatever level they choose. We shall see below, at several junctures, the effects of low interest rates in Kuwait, in particular on credit expansion. There are, however, two separate considerations with respect to the equilibrium rate of interest in a country like Kuwait. Firstly, an economy is subject to changing movements in capital flows, as a result of changing international relative interest rates (and expected changes in relative interest rates), which aspect of things we discuss in the last section of this chapter. But also, and despite the fact that Kuwait is not a fragmented and unsophisticated economy, in the McKinnon sense, we shall find later that it does have a high income elasticity of demand for money, just like many developing economies. The reason for this, we shall find, is chiefly the "trading" nature of the local stock market, which does make money balances complementary to capital investment (or investment in the stock market in this case). The McKinnon complementarity thesis does have an indirect bearing here, but as we shall see in our conclusions the allocational implications of "conduit" and "repression" literature have a direct bearing in the issues here.

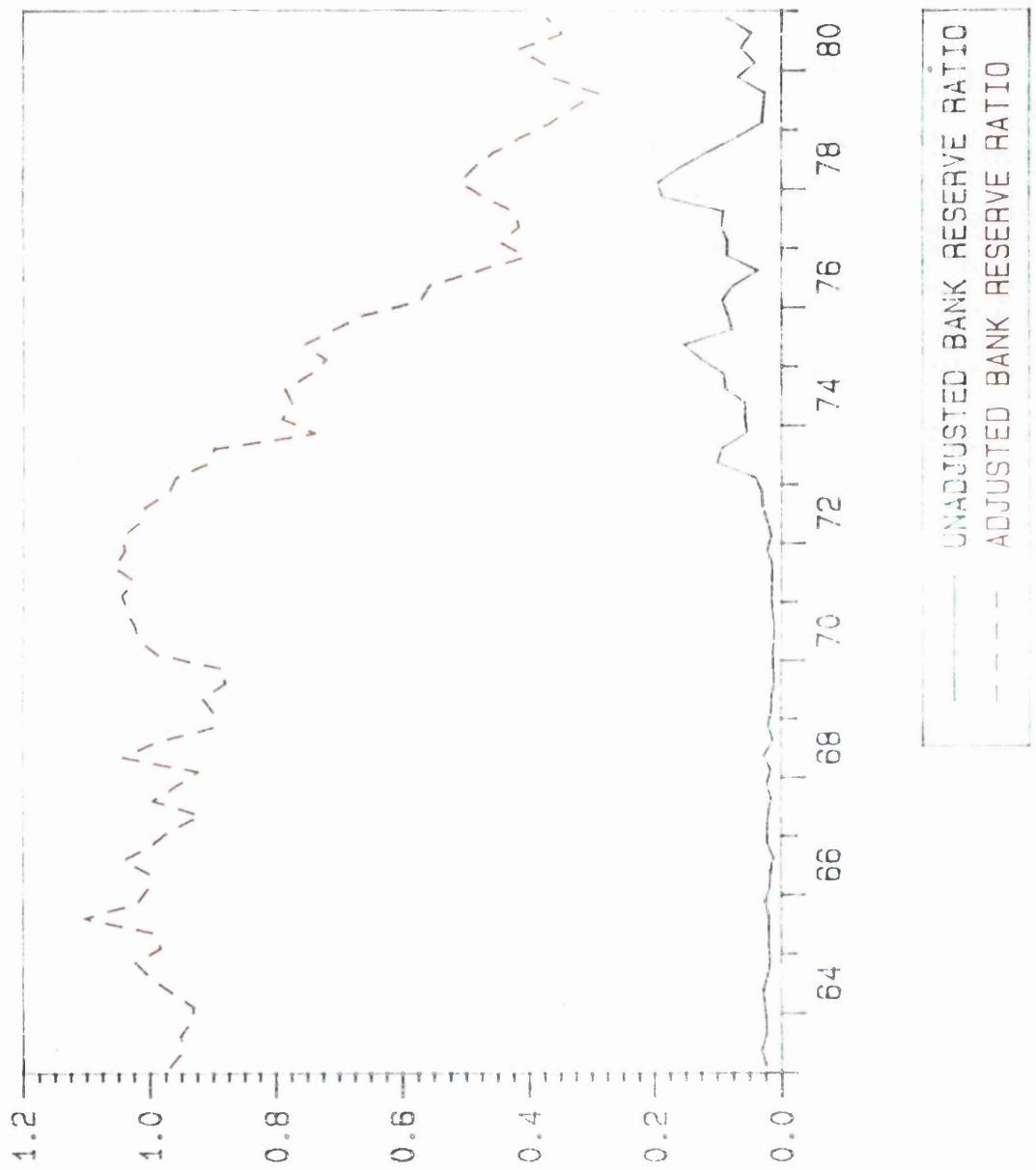
GRAPH 3: 1
MOVEMENTS IN THE MONETARY BASE ADJUSTED AND UNADJUSTED
AND IN THE NET FOREIGN ASSETS OF THE COMMERCIAL BANKS
1962-80



GRAPH 3:2
MOVEMENTS IN THE MONEY SUPPLY AND THE MONETARY BASE
1962-80



GRAPH 3:3
MOVEMENTS IN THE BANKS' RESERVE RATIO ADJUSTED AND UNADJUSTED
1962-80



The foreign asset position of the Kuwaiti commercial banks poses a major methodological problem. We can see from graph 3.1 that the commercial banking system's net foreign assets have been a larger balance sheet item than bank reserves (which for the purposes of graph 3.1 are called "unadjusted monetary base") throughout the period under study. The demand for foreign assets on the part of the commercial banking system is analysed in Chapter 4. We should note here, however, that the principal elements in the demand for foreign assets appear to be:-

- i) The historical liquidity of the banks vis-a-vis local credit demand.
- ii) The high level of foreign exchange demand by the local economy (72).
- iii) Interest rate differentials between international and domestic interest rates.

The greater part of foreign assets in bank balance sheets have been liquid foreign assets. The Central Bank of Kuwait economic report breakdown of foreign assets indicates this.

"... foreign assets retained their prominent features throughout 1972/3 with respect to both liquidity and portfolio (73). The high degree of liquidity was still ensured. Moreover the main components were balances with foreign banks and certificates of deposit" (74).

Since foreign assets were mostly liquid they should presumably be counted as bank reserves. In the analysis of the demand for foreign assets by the commercial banks in Chapter 4 we shall see that it is the first of the three elements of possible relevance to movements in foreign asset holdings of the banks which we find to be empirically most significant, namely the historical liquidity of the banks vis-a-vis local credit demand. Hence not only are a large part of foreign assets liquid, but by implication could be seen to also be "involuntary" reserves although not in the legal or statutory sense. The high liquidity of foreign asset holdings itself lends credence to this interpretation (75). However, it is important to note that not only do foreign assets qualify as reserves from a behavioural point of view but also from the legal point of view. In 1974 legislation for a liquidity ratio to be imposed by the monetary authorities took specific account of foreign assets. The liquidity ratio of 25 per cent which was imposed included foreign liquid assets such as certificates of deposit, bankers acceptances and short-term deposits in foreign currencies in recognition of the roles that we have described for foreign assets. A minimum Kuwaiti Dinar liquidity ratio of 7.5 per cent of total liabilities was included in the legislation.

We have stated that the methodology of categorisation in the IFS is not particularly helpful in the case of Kuwait. It was Newlyn (76) who stated that:-

"...comparative analysis of the operation of financial systems is complicated by the superimposition of national characteristics (77)"

Unfortunately, as we shall see later, Newlyn did not fully take this

into account in his derivation of monetary ratios for Kuwait (78) The symbol (H) which we have designated to reflect high-powered money, in the context of IMF monetary statistics, stands for reserve money. Since foreign assets are largely liquid and given the reasons set out above for considering them as reserves, a redefinition of reserve money is called for. We continue to use the Friedman and Schwartz symbolic system and we also refer to the rows of the IFS after each symbol. We define H' to mean adjusted reserve money (or monetary base) as follows:-

Reserve Money (H) (Row (4) + Net Foreign Assets (NFA_B) (Row 21-Row 26c)

Graph 4:4 shows the composition of foreign asset holdings of the commercial banks between 1973-80 which includes short term balances with foreign banks, investments, and loans and discounts to non-residents. Investments abroad have been chiefly motivated by the participation by Kuwaiti commercial banks in the capital of foreign banking operations, and loans and discounts to non-residents tend to involve mostly politically-inspired loans managed by the Ministry of Finance, and it is the category of balances with foreign banks which qualifies as liquid. It is clear that foreign assets are clearly not dominated by a desire to build up lending and client relationships abroad but rather by the desire to place short-term surplus funds:-

"Kuwaiti commercial banks adopt generally a rather conservative foreign investment policy, whereby liquidity and security considerations receive prime attention" (79)

Graphs 4:2 and 4:3 (on pages 223 and 224) show the ratio of foreign assets of the commercial banks to their total assets, and the ratio of net foreign assets of the

commercial banks to their deposits. The trend in both ratios appears to be the same. From the second quarter in 1971 when the ratio of foreign assets to total assets appeared to have peaked to its lowest point (the last quarter in 1977) this ratio dropped by 55 per cent. The ratio of net foreign assets to deposits over the same period dropped 72%, while the ratio of net foreign assets to total assets (not seen in either of Graphs 4:2 or 4:3) dropped by 68%. The drop in net foreign assets was much steeper proportionately, therefore, than the drop in foreign assets. This difference in the behaviour of the two ratios was clearly due to the fact foreign liabilities fell by much less than foreign assets. The liquid nature of foreign assets, and in particular the fact that the greater part of this caption is balances with foreign banks should mean that we consider foreign assets as part, in some way or other, of bank reserves. Our discussions above regarding the behaviour of foreign asset ratios, however, lead us to the conclusion that, since the commercial banks (in particular in the later years of the period under study) use foreign liabilities to replenish their reserves (i.e. borrowings from foreign banks take place in times of tight liquidity), a net foreign asset figure may be more appropriate as an estimate of those foreign assets which can be considered liquid assets held against resident deposits under the central bank laws (80). We shall be discussing the nature of commercial bank portfolio behaviour in Kuwait in more detail in Chapter 4, but in support of the replenishment argument regarding foreign liabilities it is sufficient that we look at Graph 4:6 where peaks in the index of the ratio of claims of the commercial banks on the private sector to total assets seem to coincide with peaks in the index of the ratio of foreign liabilities to total liabilities. The tests conducted in Chapter 4 in the foreign asset demand function for banks clearly shows foreign liabilities as the most important explanatory variable in the function. Moreover foreign

liabilities are discovered to play an important role in the explanation of commercial bank advances over the period 1973-1981. Net foreign assets or the surplus of foreign assets over liabilities would (in terms of the banks' behavioural pattern) therefore represent the basis for potential leverage and domestic credit expansion. Since total liabilities = deposits (D) + foreign liabilities (L) + other items, to consider reserves (R) + foreign assets (FA) as liquid assets held against D is to leave out an important element (L) on the liabilities side of the balance sheet in particular if it is an active element in bank behaviour. Just as we have redefined the monetary base above, we shall redefine the reserve ratio $r = R/D$ to include net foreign assets such that:-

$$r' = R' / D$$

$$\text{and } R' = C + NFA_B$$

Although it may seem that the redefinition of our variables may affect the results of our analysis because of the inclusion of net foreign assets in both (H') and (r') the Cagan method which we have chosen to use for our analysis of the effect of the proximate determinants on the money stock (81) separates the effects of changes in the reserve ratio and high-powered money whatever the definition of reserves. Our redefinitions simply portray a situation where the source of high-powered money is no longer uniquely the central bank.

The only similar type of analysis (formally speaking) to that above can be found in Arnold Harberger's discussions on Panama (82). However, his objective is different to ours, since he is talking about the substitution of a local currency for the U.S. dollar. Also his conclusions are different to ours:-

"Imagine the creation of a central bank in Panama

which would exchange printed Balboas for the reserve holdings of the commercial banks; which would borrow from abroad an amount equal to the existing "borrowed reserves" of the banking system; and which would lend this amount to the commercial banks so that they could pay off their foreign debts. The commercial banks, under this transition would end up owing to the central bank what they previously owed abroad, and the central bank would have assured their foreign liabilities. The central bank's final position would entail its holding as net foreign assets an amount equal to the existing currency supply plus net foreign assets of the banking system. But the amount of high-powered money in the system would equal the currency supply plus (approximately) the gross foreign assets of the banking system plus the coins in circulation" (83)

In fact in Harberger's terms he should have concluded that the central bank's net foreign assets (since it did not exist before) should equal either the commercial banks' net foreign assets or the currency supply plus the amount of the loans made to the commercial banking system for the banks to pay off their foreign liabilities. Likewise he should have said that high-powered money would equal the currency supply plus the newly acquired foreign liabilities of the central bank or the newly acquired foreign assets plus the loans to the commercial banks. We can imagine, in a more complex system where the central bank already exists, the effect of their taking over the foreign assets and liabilities of the commercial banks could be seen to happen in the following stages:-

- i) The central bank has only foreign assets on the asset side of its balance sheet, backing currency issued and bank balances. The commercial banks would have in such a situation, balances with the central bank (plus cash in the till), foreign assets and advances on the assets side. Foreign liabilities and local deposits would form the liabilities side. High-powered money equals currency in circulation plus bank balances.
- ii) The central bank would credit the accounts of the commercial banks in return for a transfer of the commercial banks foreign assets, thereby increasing the central bank's balance sheet by a similar amount on both sides, while substituting domestic for foreign assets in the banks' balance sheets. High-powered money has grown to the extent that bank balances at the central bank have grown.
- iii) The central bank borrows money from abroad and opens overdraft facilities for the banks to pay off their foreign liabilities. High-powered money grows again by an amount equal to the new foreign borrowing of the central bank so that it ends up being equal to currency in circulation plus the original bank balances plus the new credits to commercial bank accounts at the central bank plus the new central bank foreign liabilities.

In the picture we envisage in this chapter in using the net foreign assets of the banking system as an additional factor in high-powered money, the Kuwaiti banking system having a large surplus of foreign assets over foreign liabilities, notionally pays off its foreign liabilities from its foreign balances before handing over the remaining

TABLE 3.2

**THE PERCENTAGE CONTRIBUTION OF THE PROXIMATE DETERMINANTS
TO ANNUAL MOVEMENTS IN THE MONEY SUPPLY 1963-1981**

	H'	c	r'	TOTAL MONEY
1963	-520.57	13.71	606.85	100
1964	159.52	0.60	-60.12	100
1965	162.20	0.00	-62.20	100
1966	98.06	0.02	1.92	100
1967	82.32	1.72	15.95	100
1968	85.80	1.44	12.76	100
1969	-144.54	2.02	42.52	100
1970	191.46	-0.21	-91.24	100
1971	96.44	0.17	3.39	100
1972	51.03	-0.06	49.02	100
1973	-94.15	-0.82	194.97	100
1974	69.49	1.49	29.01	100
1975	68.82	1.38	29.68	100
1976	-17.93	1.73	116.11	100
1977	118.76	5.08	-23.85	100
1978	6.95	4.78	88.26	100
1979	88.38	0.81	10.79	100
1980	90.42	1.71	7.85	100
1981	102.27	5.86	-8.13	100

H' = High-powered Money

c = C/M2

r' = R'/D

Source : Table 3:1

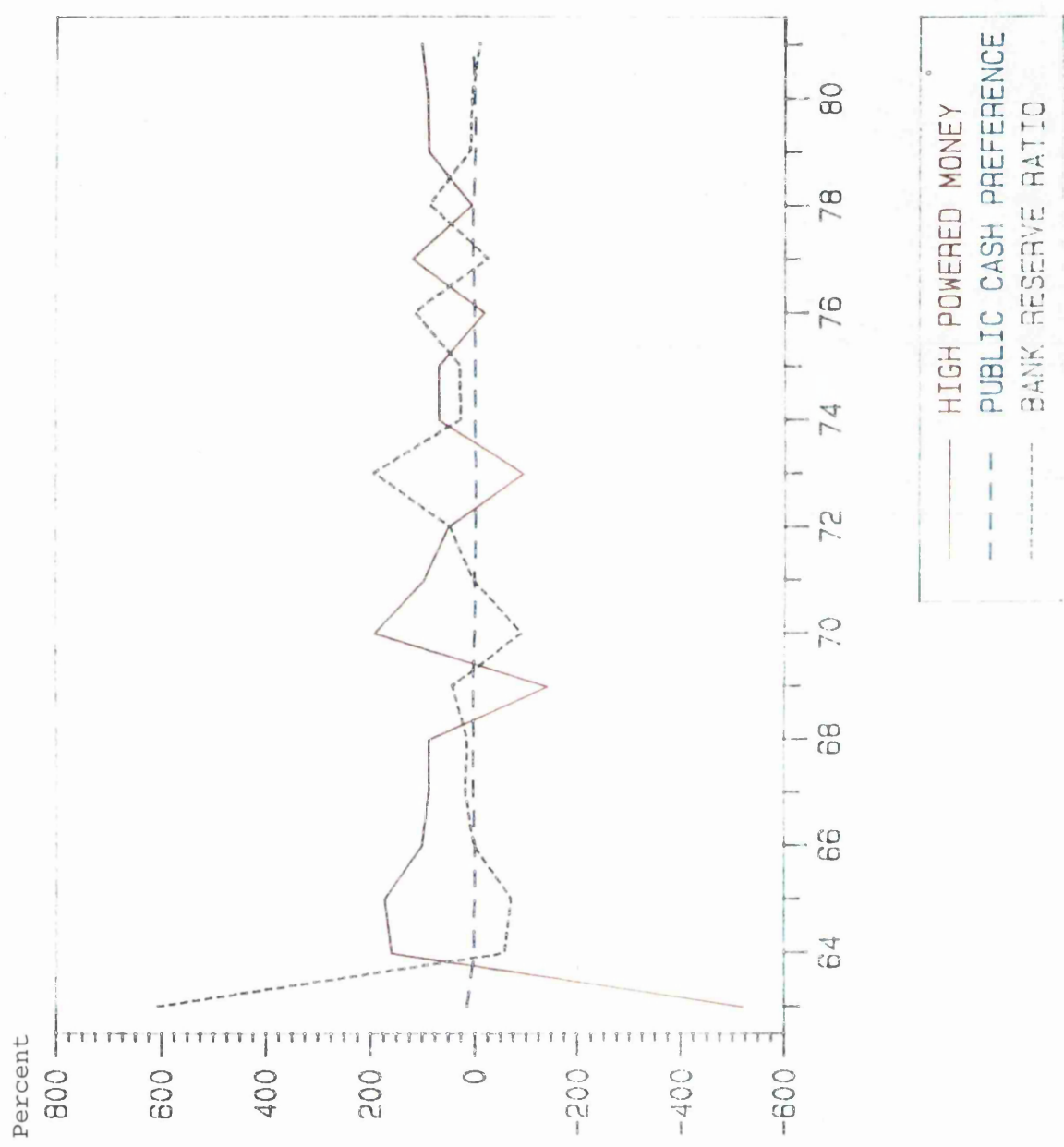
foreign assets to the central bank in exchange for credits in its accounts at the central bank. The central bank is therefore not required to borrow abroad, and high-powered money expands only by a factor equal to the net foreign assets of the commercial banks.

c) The Proximate Determinants of the Money Supply in Kuwait 1963-81

If we analyse the effects on the money supply of our adjusted proximate determinants, (H') , (c) and (r') , the results show that the public's cash preference has an insignificant effect on the rate of change of the stock of money. We can see from Table 3:2 that high-powered money had the largest positive impact on the growth of the money stock except for the years 1963, 1973, and 1976, and in 1978 when bank reserve ratios dropped markedly and had by far the largest impact on the rate of change of the stock of money. In 1969 the bank reserve ratio also had a higher positive impact than high-powered money but money supply growth was negative in that year and high-powered money had a greater absolute impact. In 1974 and 1975, but especially in 1972, bank reserve behaviour was significant but not as important as high-powered money. Table 3:1 shows the estimates and equations which we used to reach the results in Table 3:2. In particular we note in Table 3:1 that, as indeed we noted earlier, the error of the estimates are small (the error is represented by the difference between the first two columns).

In Graph 3.3 we can see the totally different behaviour of adjusted and unadjusted bank reserve ratios. (r) behaved totally differently from (r') during the period under analysis and therefore as we pointed out at the outset of this analysis to have relied on that measure of bank reserves which we would have done following the categorisations of the IFS would have led us to misunderstand the true picture. Our discussions on methodological issues in the foregoing section was aimed

GRAPH 3: 4
THE PROXIMATE DETERMINANTS OF THE MONEY SUPPLY 1964-80



entirely at avoiding this problem. In graph 3.1 we can see that the unadjusted monetary base (H) falls away in the period 1978-80 whereas net foreign assets grow considerably. It would have been difficult to explain how the monetary growth in this period (which we see in Graph 3.2) would have occurred if net foreign assets had not been an explanatory factor, in addition to the monetary base (which also appears in both its adjusted and unadjusted forms in Graph 3.2).

The importance and role of the adjusted bank reserve ratio (r') will be further discussed in the context of a later discussion of models of the Kuwaiti economy and empirical tests of money demand functions. However, we shall conclude the present analysis by looking a little more closely at our proximate determinants and deducing certain preliminary a priori conclusions from our observations. Graph 3.4 plots the contribution of each of (H'), (c) and (r') in the growth of the money stock in each of the years between 1963 and 1980. Some other things can be seen in Graph 3.4 apart from the obvious relative importance of each proximate determinant, and these include:-

- (i) The cyclical nature of the influence of each determinant.
- (ii) The inter-relationship between the influence of the bank reserve ratio and the monetary base or high-powered money.

The relative contributions of the proximate determinants and their interaction should be interpreted in order to give us an a priori theory to test. Quite clearly the monetary base represents the impact of government expenditure and net foreign assets. We can see the development of government expenditure (G) in Table 3:3. The bank reserve ratio on the other hand would seem to represent the influence of

loan demand. The liabilities of the Central Bank of Kuwait are certainly dominated by government spending throughout the period under study [84] but due to the definitions we have chosen to give to net foreign assets we have seen that government spending is only one factor determining the monetary base. Graph 3.1 demonstrates the overriding importance of the accumulation of net foreign assets in the development of the adjusted monetary base in the period under study. The bank reserve ratio on the other hand, which in our adjusted form declines sharply after 1972, as we can see from Graph 3.3, could be the result of either declining reserves or expanding liabilities of the commercial banking system. Graph 3.1 shows us a substantial rise in net foreign assets and consequently in our adjusted monetary base, and so we conclude that given this obvious growth in the supply of reserves, the increase in commercial bank liabilities and the drop in the reserve ratio was due to increased lending. Increased lending could have been due to a change in management techniques in the commercial banks or due to a response to previously unavailable lending opportunities. The fact that we choose to believe that the banks did not suddenly change their lending policies but rather reacted to increased loan demand is due both to common sense about bank behaviour and to the fact that there is a fairly good relationship between peaks in recorded economic activity and peaks in the contribution of r' in the proximate determinants equation. This can be borne out for the period after 1972 by looking at Graph 4.7 which describes the Kuwait Stock Exchange all-share index, which peaked in 1973, 1976, and 1978. In fact in the four years that r' peaked [1963, 1973, and 1976 and also 1969] the contribution of H' was negative, indicating perhaps a draining stance on the part of the monetary authorities in the face of excessive credit expansion and boom conditions.

Periods of rises in the monetary base which influence an increase in domestic economy activity, seem to cause a rise in loan demand and therefore in lending, which is followed by the authorities reducing expenditure and attempting to drain reserves at the central bank and a temporary relapse in loan demand and therefore lending. Graph 3.4 shows us the following cycles 1964-68, 1968-69, 1969-72, 1972-74, followed by almost yearly cycles to mid-1978 when high-powered money overtook the bank reserve ratio and has remained in that position ever since.

Up to 1974, the cycles appear to be long and cycles of increasing government expenditure and monetary base increases (1964-68, 1969-72) are followed by increases in loan demand. After 1972 when the stock market began its activity with government support, the average contribution of loan demand rose and the frequency of the cycles shortened as presumably the monetary authorities reacted more consciously with legislative measures in the face of economic boom and significant credit expansion. Until 1978 the liquidity of the banks and the large holdings of foreign assets by commercial banks allowed them to continue their lending activity and their switching of foreign into domestic assets in spite of attempts by the authorities to regulate these developments. After mid-1978 when bank liquidity declined so did the average contribution of the bank reserve ratio to the growth in the money stock.

Our preliminary a priori conclusions, which will be subject to investigation and empirical test are that the growth in high powered money is due partly to government expenditure but that the low absorption capacity of the economy meant that over the years the commercial banking system built up large holdings of foreign assets which continued to grow throughout the period under study and to be an

important factor in the overall growth of the adjusted monetary base. The independence of the banking system in Kuwait and the availability of foreign exchange resulting from this, meant that private sector activity became an important determinant of the development of the stock of money in the short-term. Government expenditure should be considered an ultimate and historic source of funds and of an indirect influence. Government spending does create economic activity and is a major cause of the growth of loan demand and bank borrowing which in turn is an important contributor to the growth of money supply. But high-powered money itself is largely dependent (in our adjusted form) on the growth of net foreign assets and this is only indirectly caused by government expenditure. Growth in net foreign assets and liquidity in the banking system gave the banks the ability to lend, and growth in loan demand the opportunity. Government expenditure would seem to have been an indirect cause of both. These are important and as yet undiscovered conclusions on the development of the money stock in Kuwait.

v) THE BANK RESERVE RATIO AND THE DEMAND FOR MONEY

a) A Priori and Empirical Models

In our analysis in the previous section we essentially used an priori model to organise and analyse a sample of data - the proximate determinants approach of Friedman and Schwartz. Our a priori approach provides the framework for explaining the Kuwaiti monetary sector and the way it behaves but does not provide a precise theory. This is clear from the fact that the latter part of the analysis involved a certain amount of speculation based on graphical relationships which was intended to interpret the broad relationships established by the proximate determinants analysis. Although graphs count as empirical evidence, more rigorous tests are required of the temporary conclusions

we reached in the last section:-

- (A) High-powered money (in our adjusted form) was principally determined by expansion in the net foreign asset base of the commercial banks.
- (B) The behaviour of the bank reserve ratio was mainly determined by loan demand. Foreign assets began to be switched into domestic assets especially after 1972.
- (C) Loan demand emanating from the trade and stock market sectors was influenced by government expenditure in previous periods.
- (D) The net foreign assets of the banks can be considered as liquid reserves and are determined principally by the growth in deposits.
- (E) The growth in deposits was mainly caused by government expenditure over the years.

The proximate determinants approach had a benefit as an acceptable heuristic framework within which to develop ideas. The respective roles of high powered money and the bank reserve ratio have been carefully analysed. In this respect a point of interest was raised earlier, namely what the implications were of including net foreign assets in our definition of high-powered money and reserves. We stated that the Cagan method we used worked for any definitions, but naturally the conclusions we derive from the contributions of each proximate determinant to the growth in the money stock must be altered. Almost by definition these conclusions cannot be exact as in the traditional framework (set out at

the beginning of section (i) and in section (iii) in this chapter) where the sole source of changes in high-powered money was from within the universe of government operations. Here there seems to be a form of "slack" in the shape of commercial banks foreign asset holdings which, through our redefinitions, takes us outside the universe of government operations in the explanation of the growth in high-powered money. This notion of "slack" must be intuitively appealing, however, since Kuwait being a surplus economy with a low absorptive capacity has led to the re-export by the private sector of liquidity injected by the government over time and that it was only after 1972 that demand for this liquidity in the domestic market-place actually started to grow. This historical interpretation is confirmed by the analysis in Chapter 1. The approach we have adopted is also intuitively appealing because it suggests that at such time as domestic loan demand began to grow, the monetary authorities could not control the money supply until mid-1978, which is basically what actually occurred. In Chapter 5 we analyse the difficulties the central bank faced in controlling the money supply in Kuwait, until the banks ran out of liquidity in mid-1978.

Our approach also allows us to understand the difficulty in developing any stable functions for the Kuwaiti monetary sector over a long period of time. For the period 1963-1971 the supply of nominal money by the Central Bank of Kuwait would have played a major role in the determination of the money stock, but the high "Polak coefficient" which we call the foreign exchange demand multiplier in our analysis at the end of this chapter, would have greatly reduced the effects of the resulting domestic credit expansion. For the period 1972-78 loan demand in the domestic marketplace became of major importance, which was satisfied almost completely by the activity of the commercial banks. By mid-1978 the commercial banks became relatively illiquid and the

scenario changed drastically once again.

Our conclusions developed from the a priori approach should now give way to more empirical results. We adopt such an approach and begin by analysing certain previous empirical tests of date in the Kuwaiti monetary sector.

b) Money Demand Functions and Tests

R.A. Wilson makes three different tests on the monetary series in Kuwait from July 1976 to November 1981 (85). He investigates the relationship between bank deposit and lending data and major macro-economic variables. First of all he tested the relationship between demand and savings deposits and government expenditure, euro-dollar interest rates and prices such that:-

$$D + S = a + gG - ei + pP$$

where D = demand deposits

S = time and savings deposits

G = government expenditure

i = three-month euro-dollar deposit rates

P = wholesale price index

The final result of this test was:-

$$D + S = 991.36 + 1.58 G + 28.84i$$

(8.46) (2.30) (4.26) - t statistics

where $\bar{R}^2 = 0.29$

d = 1.55

p* = 0.81

From his tests of this relationship, Wilson concludes that government

expenditure is not a good determinant of bank deposit growth. It seems strange that Wilson should get such a poor fit if his variables show a high degree of significance. Foreign interest rates meanwhile have a positive sign. However each initial test he concluded led to a Durbin-Watson statistic that revealed auto-correlation and the Durbin procedure had to be applied to transform the equation. Most research finds problems with auto-correlation on Kuwaiti monetary and macro data. The Durbin transformation would invariably however reduce the correlation coefficient and the significance of the coefficients (t - statistic). For instance in the case of this equation the Durbin-Watson statistic was increased from 1.08 to 1.75 but the correlation coefficient fell from 0.92 to 0.29. He concludes from these tests that government expenditure is not such a good determinant of private sector activity as some people assume for the period after 1975. However his series for government expenditure appears to differ a great deal from the series used here (see Table 3.3) which is extracted from the Central Bank of Kuwait Quarterly Bulletin (which is the same source used by the IFS series). Wilson claims the same sources for his series and the only possible explanation for the difference is either data adjustment which often takes place in so far as Kuwaiti economic statistics are concerned or an attempt to deflate these statistics, although it is not clear whether he does this. The size of the discrepancy requires that we tentatively accept the second reason. However, if this is the case, then there is a substantial danger of error since the GDP deflator and inflation statistics in Kuwait are highly suspect. Also Wilson does not report in any of his tests on the possibility of multicollinearity in any of his results.

Wilson's (86) second test related private sector bank advances to demand and savings deposits, foreign assets of the commercial banks, government expenditure and prices such that:-

$$B = G + d (D + S) - fF + gG + pP$$

where B = bank borrowing (advances)

F = foreign assets of the banks

The final result of this test was:-

$$B = -116.29 + 0.85 (D + S) + 0.18 F + 0.48 G$$

(-1.27) (9.62) (1.55) (1.53) - t statistics

where $\bar{R}^2 = 0.79$

d = 1.57

p* = 0.85

Bank deposits, foreign assets and government expenditure all turned out to be significant although the sign of the coefficient of F was not what Wilson was expecting. This result of Wilson's compares strangely with his previous result. Whereas government expenditure does not determine deposits it does seem to determine advances. This seems to concur with our previous general observation that government expenditure is more of a background influence on monetary developments in particular in the period studied by Wilson, than a direct one. The fact that foreign assets rise along with borrowing appears to puzzle Wilson who comments that funds deposited abroad should reduce the banks ability to expand domestic credit. If we look at our previous discussions on the question of foreign assets however, if short-term time deposits are considered to be liquid assets under the Central Bank of Kuwait regulations and they are more profitable assets than local Kuwaiti Dinar assets, banks will meet their liquidity requirement by investing in foreign assets. If liquid foreign assets partially contribute to the monetary base, which is what we have maintained, then naturally they will contribute positively to the growth in commercial bank lending. Also if customer deposits in foreign currencies rise, so will foreign assets. Wilson's third and last test which we review below maintains that the chief

reason for foreign assets expanding is expansion in foreign liabilities. Kuwaiti commercial banks are seen by Wilson to be conservative and they match currencies on the asset and liabilities side as well as covering foreign liabilities connected with trade. In the second test, correcting for auto correlation using the Durbin procedure reduced the correlation coefficient (but only to a limited extent) from 0.99 to 0.80.

Wilson (87) tests the relationship between foreign assets of the commercial banks and the supply of bank deposits, the amount of foreign liabilities and the euro-dollar interest rate such that:-

$$F = c + d (D + S) + 1L + ci$$

where L = foreign currency liabilities of the banks.

The final result of this test was:-

$$F = 76.52 + 0.36 (D + S) + 0.77 L - 0.70 i$$

(1.78) (8.80) (11.33) (-0.31) - t statistics

where $\bar{R}^2 = 0.92$

d = 1.75

p* = 0.76

Wilson found foreign liabilities of the banks extremely important as determinants of foreign assets. He interprets this as their desire not to hold open foreign exchange positions but rather to match currencies. We already commented above that he found that the rise in foreign assets has been largely due to a rise in foreign liabilities. Also the interest rate appears to be only significant in its form as a rate of change which explains our earlier comment about banks holding liquid

reserves in the most profitable assets between domestic and foreign currency. Wilson did find some dependence of foreign assets on deposits. Our own tests on the determinants of the demand for foreign assets by the commercial banks are carried out in Chapter 4. We find that our results are similar to those of Wilson in that foreign liabilities and deposits are significant explanatory variables of foreign assets in bank balance sheets, with foreign liabilities as the variable with the highest coefficient. We found, however, foreign currency deposits more significant and more important than total deposits as an explanatory variable in the foreign asset demand function.

The most revealing result of Wilson's tests is the relationship between loan demand and government expenditure where private sector borrowing can be said to be influenced by government expenditure. The apparent dependence of bank advances on deposits is not so interesting. The dependence of bank advances on foreign assets can be said to be due to their role (apart naturally from covering foreign liabilities) as reserves. This particular relationship we shall find to be important in our discussions of foreign assets, later, but in a different form. The most significant independent variable in Wilson's second test, however, is government expenditure. The other tests are of less interest, although the dependence of foreign assets on deposits and less significantly on foreign interest rate changes also points to their role as reserves. If government expenditure appears to influence bank borrowing, but not money supply then one should test for a relationship between bank borrowing (as a proxy for loan demand) and the money supply. This Wilson does not do. Wilson's tests in general leave much to be desired.

Some other studies preceded Wilson. Crockett and Evans in their

estimate of a money demand function for Kuwait do not include an opportunity cost variable in the form of foreign or domestic interest rates at all (88). They did include the rate of change of prices as possibly representing the return on real assets in the economy which should by all accounts have a negative influence on money demand. They found the rate of change of real M2 to be closely correlated with real non-oil GDP (NOGDPR) such that the correlation coefficient was $R^2 = 0.9841$ for a sample period from 1972-78, but that the rate of change of prices was not significant. They did not seem to have problems of auto-correlation as Wilson did because they deflated all variables by the GDP deflator prior to testing to avoid spurious correlation. Wilson did find the wholesale price index to be a significant independent variable in his first two tests and he consequently adjusted for this in each case by deflating the variables and omitting P. Perhaps in both cases the tests should have also tried lagged endogenous variables, since if bank advances seem to be determined partly by government expenditure, auto-correlation could also result from this. Auto-correlation results when the serial errors are inter-related and the only way of making sense of the picture is by looking at interactions over time and describing the relationships through the use of lagged functions. Although Wilson's first test (89) shows the insignificance of government expenditure, Crockett and Evans' result regarding the important role of non-oil GDP which is obviously closely linked with government expenditure, shows Wilson's results could be misleading. The only possible explanation of these two apparently contradictory results is that non-oil GDP is not tantamount to government expenditure but somehow is a lagged function of government expenditure. There is no denying that government expenditure is the ultimate source of funds in Kuwait. However, the accumulation of assets by the private sector over time has given the private sector an

independence which is possibly the overriding determinant of short-term monetary movements as we shall see below. This result agrees with the picture of the Kuwaiti financial system which has slowly been building up throughout this analysis.

The third and earliest available study of Kuwait's monetary data is in Khouja and Sadler (90). They included the three-month eurodollar rate (alongside government expenditure) as an explanatory, albeit negative variable. But overall the tests of the demand for money function had poor results with a correlation coefficient not exceeding $R^2 = 0.535$. The impact of government expenditure they found to be statistically significant and positive (91). Their sample of data ranged from 1961 to 1976 as opposed to Wilson's 1976-81 and Crockett and Evans 1972-78. This probably explains why the results are very different from those of Wilson and Crockett and Evans. They were different from both in giving the three month eurodollar deposit rate a significant role, and they were different from Wilson's results in giving government expenditure a direct explanatory role in the demand for money function. The results were not good, however. Relatively low correlation coefficients of 0.789 and 0.819 were found with respective Durbin-Watson statistics of 2.826 and 2.827 which reveal inconclusivity of the test for auto-correlation. The period 1961-1976 is possibly also the period most fraught with data problems.

c) The Opportunity Cost Variable and Financial Assets
Competing with Money

As Wilson indicates (92) the apparent lack of impact of changes in the eurodollar interest rate on local bank deposits in Kuwait is due to the fact that banks probably offer clients greater inducements to deposit funds of an indirect nature in response to rises in international

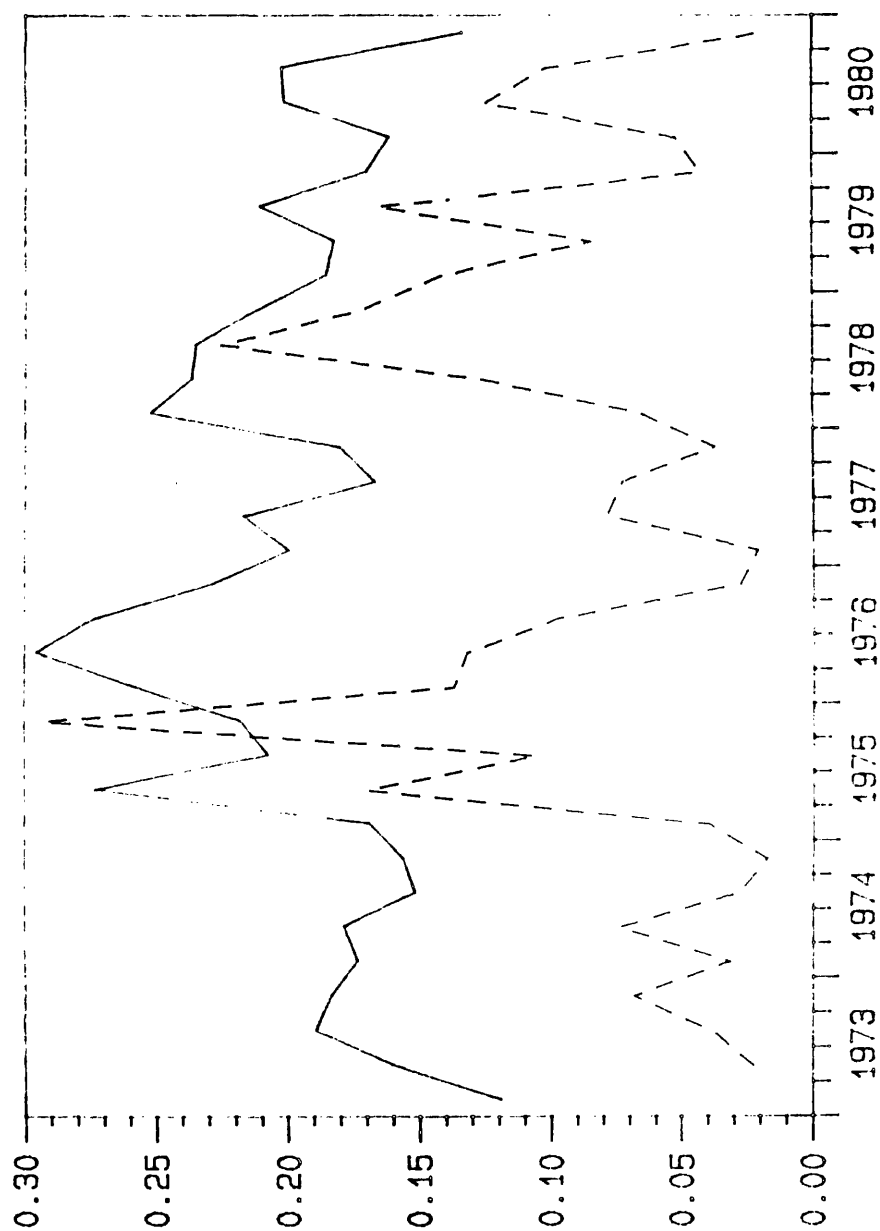
interest rates and even possibly even raise interest rates unofficially above the legal limit on loan interest. They are able to pay implicit interest rates sometimes above lending rates because of profit from the highly lucrative but unofficial discounted cheque market which we shall be discussing in detail later. But in theory there are other competing assets to money in the domestic capital markets of any given country, apart from foreign currency assets. There are domestic bonds and stocks. The high income elasticity of demand for money that Crockett and Evans found for Kuwait (1.411) is at the top end of the range for developing countries. This result might seem to reflect a lack of other financial assets apart from money in the economy and a certain degree of backwardness of the financial system (93). However, ironically we find the opposite to hold. Kuwait as we shall find out in Chapter 4 has a stock market which had a market capitalization of KD.2.5 billion at the end of the second quarter of 1978, in excess of the stock of M2 at the same time (KD.2.1 billion). Turnover in the stock market in the first half of 1978 reached 20 per cent of the total capitalization of the listed companies. There is also a bond market which by mid-1978 boasted a float in excess of KD 500 million. The private sector however has almost no share of the bond market at all, while it did hold 77 per cent of the stocks in the stock market at the end of 1978. The bond market was mainly a government market although the commercial banks bought a share of each new issue. Above all, the importance of quasi-money betrays an advanced financial system. These observations therefore seem to contradict Crockett and Evans' result, however we shall see in Chapter 4 that the appearance of an advanced financial system in Kuwait goes no further than that. We have already seen that quasi-money (or time deposits) are short-term and are linked with the trading nature of the stock market. Hence Crockett and Evans' results are not so incomprehensible as they might at first seem.

In the Kuwaiti economy the importance of cheques in commercial and financial transactions is paramount. Trade credit is almost entirely based on post-dated cheques which change hands in the settlement of payments rather as endorsed bills of exchange would which save on cash balances and increase the importance of quasi-money vis-a-vis demand deposits and currency (94). Even more significantly, the importance of post-dated cheques in commercial transactions made them a natural candidate for the settlement of forward transactions on the stock market. In Chapter 4 the detailed workings of this system will be investigated, the broad impact of this system of dealing on Kuwait's monetary structure is all that interests us at this stage. The use of cheques was ultimately connected with the overdraft lending system of the commercial banks, and the reason why cheques adopted features similar to the general acceptability of currency notes as legal tender (as long as the signature belonged to a reputable name) was so as to avoid paying cheques into bank accounts and thereby reducing the overdraft balance. These overdrafts remained as evergreen loans.

In summary, the high turnover in the stock market meant that substantial bank balances were kept for this purpose and substantial overdrafts incurred which were related to stock market investment. We see as early as in 1974 a reference to this in the Central Bank of Kuwait economic report:-

"...besides, a positive correlation could presumably be traced between the movement of current accounts and the activity of the domestic stock market. This is only natural since the said activity is mainly financed through bank overdrafts entered on the

GRAPH 3:5
THE RELATIONSHIP BETWEEN THE TURNOVER IN THE STOCK OF MONEY (M2)
IN KUWAIT AND THE TURNOVER IN THE STOCK EXCHANGE 1973-1980



— AVERAGE QUARTERLY BANK CLEARINGS/MONEY SUPPLY (M2)
- - - NO OF SHARES TRANSACTED PER QTR/NO OF SHARES OUTSTANDING PER QTR

debit side of the current account" (95).

Wong (96) analyses the turnover in demand and time deposits in Singapore to try and determine the extent of their use for financial transactions, as opposed to normal transactions. Unlike Kuwait these results showed competition rather than complementarity between time deposits and other financial assets. In the case of Kuwait we can see from Table 3.4 and Graph 3.5 that for the period 1973-80, the turnover in M2 (called T1) is correlated with the turnover in the stock market (called T2) except for the period in 1976 when the peaks in T2 appeared six months before the peak in T1 due to the fact that many transactions concluded in this period on the stock market were forward transactions settled by six month post-dated cheques, illustrating clearly that the forward stock market is based on the use of post-dated cheques. Complementarity between money and stocks may seem strange to a student of economic theory, however we did conclude in Chapter 1 and we shall also analyse in Chapter 4 the fact that the narrowness of the stock market, the government support and the extraordinary price rises of stocks meant that the market was a trading rather than a holding market. The fact that the private sector also shunned the bond market and bond issues were almost always placed with government institutions or banks, leads us to conclude that the Kuwaiti private sector's investment style meant that quasi-money was a waiting room for funds seeking trading opportunities. We analyse this proposition in greater detail in Chapter 4 and conclude that the high level of quasi-money we see in the statistics does not qualify the Kuwait financial system to be called an advanced financial system.

The use of post-dated cheques in commercial and financial transactions increased the ratio of quasi-money to M2 because time deposits were

TABLE 3:3

ECONOMIC AND MONETARY DATA ON KUWAIT 1973-81
(Millions of Kuwaiti Dinars)

		M2	G	I	P	A	N	D	S
1981	IV	3 866.0	760.0	13.80	208.0	3 459.0	983.2	3 581.3	595.2
	III	3 525.4	747.0	18.44	207.7	3 170.7	1 045.7	3 261.1	595.0
	II	3 385.6	864.0	17.47	209.6	2 991.7	986.3	3 124.0	589.0
	I	2 974.7	626.0	16.33	204.3	2 802.5	807.8	2 726.4	575.9
1980	IV	2 857.6	568.0	17.10	202.4	2 676.5	745.8	2 606.3	587.9
	III	2 758.7	696.0	12.08	197.7	2 566.8	757.0	2 521.7	489.9
	II	2 632.4	684.0	11.15	189.8	2 306.1	849.2	2 408.8	470.2
	I	2 482.2	470.0	17.11	186.4	2 244.7	757.9	2 259.9	439.8
1979	IV	2 289.7	624.0	14.70	181.3	2 123.6	603.6	2 073.8	355.6
	III	2 247.6	455.0	11.66	177.2	2 088.9	534.9	2 035.2	287.7
	II	2 038.4	440.0	10.62	170.2	1 818.1	558.1	1 848.8	225.0
	I	1 986.2	498.0	10.87	174.0	1 670.2	606.9	1 798.3	210.6
1978	IV	1 950.3	428.0	11.08	168.0	1 564.1	612.9	1 773.3	181.3
	III	1 845.6	334.0	8.71	166.7	1 355.1	569.5	1 667.4	129.9
	II	1 724.0	427.0	7.84	161.4	1 282.0	512.3	1 556.9	105.1
	I	1 611.7	378.7	7.28	164.0	1 192.5	457.9	1 451.4	105.9
1977	IV	1 583.3	360.4	7.11	167.9	1 236.7	402.6	1 432.4	87.5
	III	1 443.0	367.3	6.21	170.2	1 177.6	430.9	1 299.6	110.4
	II	1 405.8	363.2	5.56	161.6	1 082.9	407.5	1 266.0	102.5
	I	1 312.4	315.5	5.11	168.1	947.1	424.1	1 175.5	130.8
1976	IV	1 220.1	256.8	5.25	163.0	934.3	350.8	1 091.0	165.7
	III	1 145.1	206.8	5.68	159.2	809.0	459.6	1 028.7	139.5
	II	1 101.3	252.6	5.86	149.3	703.4	477.0	987.1	124.2
	I	964.2	211.2	5.54	151.2	593.9	411.2	858.0	98.0
1975	IV	891.1	181.3	6.80	151.2	506.7	455.4	789.4	121.6
	III	823.8	197.5	7.14	149.4	436.0	461.7	729.5	121.0
	II	767.1	199.1	6.46	141.1	389.9	404.2	673.2	110.0
	I	703.5	353.0	7.54	138.3	370.4	366.4	617.4	108.7
1974	IV	720.6	174.6	10.54	136.4	418.0	418.0	638.9	173.1
	III	693.5	200.2	13.13	135.3	334.2	428.6	614.2	200.0
	II	647.0	137.4	11.44	136.2	319.5	409.1	571.2	165.0
	I	606.6	87.9	9.03	131.4	274.6	389.7	532.5	146.7
1973	IV	571.9	152.1	10.13	125.7	249.5	342.9	500.8	93.4
	III	528.7	88.3	10.99	123.5	218.4	372.1	462.4	83.9
	II	513.1	79.2	8.47	112.1	193.0	356.6	442.7	76.7
	I	510.4	121.6	7.37	108.9	170.5	412.6	449.7	76.7

		F	L	B	W
1981	IV	2245.5	1262.3	1738.5	163.9
	III	1990.3	994.6	1520.9	164.3
	II	1959.4	973.1	1469.5	164.6
	I	1839.3	1031.5	1388.3	171.6
1980	IV	1880.1	1134.3	1436.7	164.9
	III	1713.3	956.3	1234.8	144.3
	II	1693.4	844.2	1254.4	154.1
	I	1558.5	800.6	1206.2	154.3
1979	IV	1407.5	803.9	1028.9	139.9
	III	1260.2	725.3	928.9	62.4
	II	1291.7	733.6	991.8	59.7
	I	1270.3	663.4	974.7	62.1
1978	IV	1214.4	601.5	926.4	99.3
	III	940.0	370.5	683.7	71.1
	II	899.4	387.1	671.4	77.0
	I	868.6	410.7	640.8	74.6
1977	IV	822.4	419.8	626.1	114.9
	III	791.1	360.2	577.8	78.7
	II	719.9	312.4	500.6	76.3
	I	690.5	266.4	477.2	72.1
1976	IV	674.9	324.1	459.1	71.0
	III	689.1	229.5	462.0	69.1
	II	621.3	144.3	390.6	69.3
	I	567.4	156.2	346.5	68.9
1975	IV	614.4	159.0	402.3	87.3
	III	591.6	129.9	375.2	79.4
	II	527.7	123.5	339.8	77.9
	I	501.8	135.4	334.7	74.8
1974	IV	561.4	143.4	384.1	83.7
	III	546.6	118.0	355.5	85.1
	II	510.4	101.3	316.7	71.3
	I	481.6	91.9	293.1	60.7
1973	IV	479.1	136.2	293.9	58.2
	III	487.1	115.0	292.1	62.4
	II	481.6	125.0	302.8	62.2
	I	486.9	74.3	325.4	66.0

M2 = Money Supply

G = Government Expenditure

I = Average Daily Quotations For The 3-Month Eurodollar Deposit Rate

P = Wholesale Price Index

A = Advances To The Private Sector

N = Net Foreign Assets Of The Commercial Banks

D = Total Deposits Of Residents With The Banking System

S = Foreign Currency Deposits Of Residents With The Banking System

F = Foreign Assets Of The Commercial Banks

L = Foreign Liabilities Of The Commercial Banks

B = Commercial Banks Bank Balances Held With Foreign Banks

W = Government Deposits With The Commercial Banks

TABLE 3.4THE RELATIONSHIP BETWEEN THE TURNOVER IN THE MONEY STOCK
AND STOCK MARKET TURNOVER IN SHARES 1973-80

		T1	T2

1980	IV	0.1338	0.0220
	III	0.2028	0.1016
	II	0.2018	0.1249
	I	0.1616	0.0521
1979	IV	0.1703	0.0427
	III	0.2111	0.1661
	II	0.1826	0.0841
	I	0.1854	0.1417
1978	IV	0.2121	0.1727
	III	0.2350	0.2251
	II	0.2362	0.1262
	I	0.2521	0.0656
1977	IV	0.1803	0.0372
	III	0.1669	0.0725
	II	0.2172	0.0782
	I	0.1996	0.0207
1976	IV	0.2283	0.0275
	III	0.2733	0.0967
	II	0.2955	0.1315
	I	0.2579	0.1365
1975	IV	0.2180	0.2924
	III	0.2072	0.1053
	II	0.2735	0.1696
	I	0.1690	0.0397
1974	IV	0.1563	0.0173
	III	0.1516	0.0277
	II	0.1790	0.0737
	I	0.1734	0.0314
1973	IV	0.1835	0.0683
	III	0.1891	0.0385
	II	0.1600	0.0227
	I	0.1195	-

T1 = BC/M2

T2 = TS/NS

BC = Average Monthly Bank Clearing

TS = Volume of Shares Transacted

NS = Number of Shares Outstanding

fixed and the exploitation of trading opportunities led to borrowing against time deposits for relatively short periods. A considerable amount of loan demand originated in the stock market which is a direct and indirect beneficiary of government expenditure. The insignificant yields in the stock market over the period under study compared with deposit yields also indicated that it is a trading not an investment market. It cannot be considered to compete as an asset with money. Rather, the demand for money is a complementary factor to the demand for stock, in a manner, as we saw earlier in this Chapter, reminiscent of the "conduit" theory of the demand for money in developing countries. Changes in the overdraft system are however due and we discuss these in Chapter 4 because although those reforms fall slightly outside of the period of study they will have important repercussions on the factors discussed in this section (97). This is a most interesting finding and this general area has been under-researched in the development of monetary systems in developing economies.

d) Some Tests and Conclusions on the Demand for Money and the Behaviour of the Money Stock 1973-1981

There is wide agreement in the literature on monetary matters that a demand for money function should contain a scale variable relating to the level of transactions and a variable representing the opportunity cost of holding money. The tests of Kuwait's monetary sector show that the price of real assets is not competitive with the money stock, and that developments in foreign interest rates have little if an ambiguous importance.

The three month eurodollar interest rate appeared to be a negative influence in the early period which was studied by Khouja and Sadler. But as we saw, Khouja and Sadler's results we considered indecisive due to poor data and results which included possible auto-correlation with a low regression coefficient. By contrast, the later period which was

studied in Wilson's first test showed a clear positive influence of foreign interest rates on deposit growth. Rising euro-dollar interest rates lead the banks to increase yields on their deposits in some way or another, possibly by offering loans at rates which compensate for rising yields abroad or allowing depositors other hidden advantages. When yields in Kuwait do lag foreign yields, arbitrage by bank customers creates a rise in loan demand and therefore a rise in the money stock for short periods until the banks adjust for decreasing local liquidity. Hence the positive sign one could encounter in testing eurodollar interest rates as an independent variable in the money demand function. We shall pursue this in more detail in the last section of this chapter.

We have seen that neither the rate of change of prices, or yields in the stock and bond markets could be considered as opportunity cost variables in the demand for money function. We found that quite the reverse actually held in the case of the stock market. Our discussions showed that the stock market was the origin of much of the loan demand which had a positive influence on the growth of the money supply.

Crockett and Evans showed that there existed a good relationship between non-oil GDP and the demand for money in Kuwait. Al-Bashir (98) in his econometric study of Saudi-Arabia also prefers to use an estimate of the non-oil GDP to determine the demand for money. The irrelevance of the oil sector in the analysis of money is stressed by Khouja and Sadler:-

"... the impact multiplier estimate (or export earnings minus net factor payments) was rather low at approximately 1.15 (when regressed against GDP). This implies that while oil exports and income on foreign assets are of paramount importance as a

TABLE 3:5

THE VELOCITY OF MONEY IN KUWAIT 1963-1981
 (Millions of Kuwaiti Dinars)

Year	NOGDP	M2	$v = \text{NOGDP} \div \text{M2}$
1963	356.3	177.6	2.0062
1967	380.3	204.9	1.8560
1965	417.1	215.9	1.9319
1966	502.5	305.2	1.6464
1967	518.3	321.6	1.6116
1968	578.3	386.4	1.4966
1969	596.6	378.4	1.5766
1970	543.2	361.8	1.5014
1971	732.2	418.7	1.7467
1972	787.7	493.6	1.5958
1973	691.1	571.9	1.2084
1974	1147.7	720.6	1.5927
1975	1336.4	891.2	1.4996
1976	1688.3	1220.3	1.3835
1977	1968.1	1583.3	1.2430
1978	2109.0	1950.3	1.0814
1979	2972.8	2289.7	1.2983
1980	3639.5	2857.6	1.2736
1981	3864.7	3866.0	0.9996

NOGDP = Non-Oil Gross Domestic Product

Sources: NOGDP, I.M.F. International Financial Statistics
 M2, Central Bank of Kuwait Quarterly Statistical
 Bulletin

source of foreign income ... their income generating effect measured in terms of the GNP multiplier is minimal It is important to note that government revenues from oil and foreign investments also have weak multiplier effects on GNP together with its endogenous components" (99)

Estimates of non-oil GDP can be obtained directly from Ministry of Planning data on sectoral GDP. GDP data is however notoriously inaccurate and cannot for instance properly estimate the contribution of trade or real estate, which are both considerable sectors. Another method would be to deduct government net saving from estimates of GDP, but this also leads to inaccuracies. Crockett and Evans' result concerning the relationship between money and non-oil GDP was similar to ours. We used IMF data for the International Financial Statistics to estimate non-oil GDP. Crude petroleum exports were deducted from GDP; and Table 3:5 displays the results of the years 1963-1981. Our test of the relationship between non-oil GDP and M2 revealed no autoregression (Durbin Watson = 1.97) and had a high $R^2 = 0.98$. We found an income elasticity of demand for money (0.93) not as high as in the Crockett and Evans result, presumably because of the different sample.

Tests of government expenditure as the ultimate source of liquidity should have proved equally successful as the Crockett and Evans' results on non-oil GDP, but they did not. Both Wilson's and our tests showed an insignificant t-statistic for government expenditure at any level of confidence. Clearly, while government expenditure is the ultimate source of the money supply, the creation of bank credit is the immediate cause of monetary expansion in Kuwait in particular after 1972. The build up in liquid assets above the 25 per cent statutory requirement

allowed the banks to respond to rises in loan demand.

We restricted any further tests to the period 1973-1981 in order to limit the sample and not to obtain too many conflicting results. Also 1973 as a start date for the series we test (which are tabulated in Table 3.3) is logical both in terms of the watershed created by the oil price explosion which occurred in that year and in terms of the reorganisation of the administration of government finances, which affected the commercial banks:-

"In 1972, the central bank was entrusted to execute all local and foreign business transactions for government ministries and agencies. As those transactions were previously processed through the commercial banks, all government balances in local currency were transferred from those banks to the central bank" (100).

Government deposits at the commercial banks declined sharply for the first time since 1968.

"As regards government deposits currently kept with the commercial banks, they are partly in foreign currency, and partly in the form of coverage for certain transactions such as guarantees" (101).

We tested government expenditure, advances to the private sector, foreign interest rates and prices against M2, and found in all variations of the equations, advances to the private sector to be the most significant variable. We tested the equation:-

$$M2 = \varepsilon + bG + cA + dI + eP$$

where G = government expenditure

A = advances

P = wholesale price index

I = daily average quotation of the 3-month Eurodollar rate

and the result was:-

$$M2 = 412.20600 + 0.21255 G + 0.95617 A - 7.40743 I - 0.23076 P$$

(251.90200) (0.21721) (0.07075) (5.49573) (1.83746) - standard errors

(1.64) (0.98) (13.52) (-1.35) (-0.13) - t statistics

$$\bar{R}^2 = 0.993 \quad N = 36$$

$$d = 0.80$$

$$COND. = 63$$

The Durbin-Watson statistic (d) indicated autoregression being lower than the lower critical value for the d statistic ($d_L = 1.15$), and the condition number (COND.) indicated no multicollinearity. The condition number which we use throughout our estimations is an index of the degree of multicollinearity in a regression; the higher the condition number the greater the degree of collinearity in the independent data set. A result below COND. = 100 is good.

The Hildreth-Lu procedure (102) transforms an equation:-

$$y = a + bx + e$$

$$\text{to } y - py_{-1} = a(1 - p) + b(x - px_{-1}) + e^*$$

it then selects the value of p which minimises the sum of the squared residuals in the transformed equation. This procedure helps to obtain a better result for the regression to allow us to test again for autoregression. The Hildreth-Lu procedure is an alternative but similar method of correcting for auto-regression in residuals to the Durbin or the Cochrane-Orcutt procedures. Its application to the above equation led to a better result:-

$$M2 = 325.25000 + 0.14431 G + 0.95624 A - 4.35914 I + 0.30741 P$$

(269.44900) (0.14172) (0.06760) (5.68670) (2.07707) - standard errors

(1.21) (1.02) (14.15) (-0.77) (0.15) - t statistics

$$\bar{R}^2 = 0.996 \quad N = 36$$

$$d = 1.69 \quad \text{COND.} = 31$$

$$p = 0.63546$$

The Durbin-Watson statistic indicated no autoregression, being higher than the upper critical value for the d statistic (1.55). Advances (A) were a highly significant determinant of M2. None of the other variables including government expenditure were significant.

We tried to determine whether government expenditure in previous periods was significant:-

$$M2 = 311.45000 + 0.01336 G_{-1} + 0.97943 A - 5.72240 I + 0.58361 P$$

(297.95600) (0.14804) (0.06976) (5.85202) (2.25699) - standard errors

(1.05) (0.09) (14.04) (-0.98) (0.26) - t statistics

$$\bar{R}^2 = 0.995 \quad N = 35$$

$$d = 1.67 \quad \text{COND.} = 35$$

$$p = 0.62321$$

No autoregression was apparent and the regression coefficient was high and there was no evidence of multicollinearity. But again the only significant t-statistic was for A. This confirms the importance of domestic credit expansion as a determinant of the money supply over the period 1973-81.

Government expenditure appeared never to be significant in our tests. However, since logically government expenditure was the ultimate source

of liquidity in Kuwait we applied several lagged functions to explain the relationship between M2 and government expenditure. When we applied a Koyck distributed lag to the relationships between M2 and government expenditure to try to solve the continuing mystery of the role of government expenditure we were successful. The Koyck distributed lag allows government expenditure in previous periods to influence the money supply in logarithmic decreasing importance according to age. Wilson's second test which showed that bank advances were influenced by government expenditure, combined with our tests which showed the importance of advances, encouraged us to follow this line of enquiry.

To avoid spurious correlation from the start we deflated the variables in the equation we tested the following equation:-

$$\frac{M2_t}{P_t} = a + b \frac{G_t}{P_t} + b_1 \frac{G_{t-1}}{P_{t-1}} + \dots + b_n \frac{G_{t-n}}{P_{t-n}}$$

was expressed as:-

$$\frac{M2_t}{P_t} = a + \left(\frac{M2_{t-1}}{P_{t-1}} \right) + b \frac{G_t}{P_t}$$

The test yielded the following result

$$\frac{M2_t}{P_t} = -0.14525 + 1.02347 \left(\frac{M2_{t-1}}{P_{t-1}} \right) + 0.15237 \left(\frac{G_t}{P_t} \right)$$

(0.18568) (0.04649) (0.19019)

(-0.78) (22.01) (0.80)

- standard errors
- t statistics

$$\bar{R}^2 = 0.989 \quad N = 35$$

$$d = 2.14 \quad \text{COND.} = 14$$

$$h = -0.43073$$

The Durbin-Watson statistic might suggest that there are no autoregression problems. However, due to the presence of a lagged dependent variable the d statistic is biased and unreliable. Durbin's h statistic was therefore calculated and its value confirms that autocorrelation is not a problem. Multicollinearity also appeared not to be a problem. It is clear nevertheless that government expenditure in the present period (t) is not significant, whereas the t-statistic for the second term is significant which indicates that the Koyck structure correctly reflects the influence of government expenditure on the money supply. The success of the Koyck distributed lag form for the function relating government expenditure to the money

supply, and our suggestion that this function indicates an indirect causation between these two factors, comes as no surprise if we return to our discussion of the proximate determinants and the fact that adjusted high-powered money comprises currency issued, bank reserves with the central bank, and, the largest element of all, net foreign assets. In our tests of the foreign asset demand function in Chapter 4, deposits are shown to be important explanatory variables. Deposit growth is also an important explanatory variable of net foreign assets. As we saw with Wilson's tests, government expenditure doesn't seem to determine deposit growth but does have a significant explanatory role in the growth of bank advances. We questioned Wilson's data on government expenditure, and suggest that government expenditure was crucial in the build up of liquidity in the commercial banking system. This "slack" of foreign bank liquidity, which was built up over the years, lead to a delayed multiple expansion of deposits, at such time as increases in loan demand allowed the commercial banks to lend domestically.

Broadly speaking, therefore, our empirical results are consistent with the conclusions (A) - (E), listed at the beginning of this section, which we had deduced from the previous a priori analysis.

vi) THE FOREIGN EXCHANGE DEMAND MULTIPLIER AND CURRENCY SUBSTITUTABILITY

Given the importance of foreign assets to commercial banks and the fact that these banks have to manage this liquidity in the light of the fact that the Kuwaiti economy has a sizeable demand for foreign exchange, on which we expand in Chapter 4 (103), we ought to look carefully at the nature of this demand for foreign exchange, which was summarized in late

1975 as follows:-

"...the contractionary impact of the large balance of payments deficits incurred by the private sector which reflects, in addition to increased imports, substantial net capital outflows... Private capital movements were mainly influenced by the rise in world interest rates, the improvement in the position of the dollar, ... and the comparative stagnation of the domestic stock market" (104).

We have established that domestic credit expansion leads to leaks of funds abroad (105). Imports and capital outflows reduce the money supply while government expenditure and lending increase it. The questions posed here involve determining the extent of the leak and whether it is variable. The tests of demand for money functions discussed above seem to agree in not giving foreign interest rates much importance in the determination of the money stock except possibly in the short-term. Also a relatively stable velocity of money in the short-run tends to lead us to believe that imports and capital outflows are exogenous variables.

To estimate the extent of the leak let us return to the Polak model (106) and specify it more fully. This model tells us that there is no one-to-one relationship between money supply and domestic credit expansion in a small open economy with a fixed exchange rate. The national income identity:-

$$\bar{Y} \equiv \bar{A} + \bar{X} - \bar{IM}$$

where \bar{A} = domestic absorption which comprises exogenous consumption investment and government spending

$$\bar{X} = \text{exogenous exports}$$

$$IM = \text{imports}$$

The balance to payments identity shows the change in international reserves as being the sum of the current and capital account balances:-

$$\Delta B \equiv \bar{X} - IM + \bar{K}$$

where capital flows are assumed to be exogenous.

The difference between domestic credit expansion (ΔDA) and the change in the money stock (ΔM) is shown as the change in international reserves:-

$$\Delta M = \Delta NFA + \Delta DA.$$

This difference, in the context of monetary management, must necessarily be a function of the only endogenous variable in the balance of payments identity (ie. imports). Imports are assumed to be a function of nominal income which in turn is a function of the money stock such that:-

$$IM = fY$$

and

$$M = \frac{1}{v} Y$$

where v is the velocity of money.

The long term solution to the model requires that:-

$$\Delta NFA = \frac{1}{zv} (\bar{X} + \bar{K}) - \Delta DA$$

$$\Delta Y = \frac{1}{z} (\bar{X} + \bar{K})$$

such that $\Delta NFA = 0$ and $\Delta Y = Y_{-1}$

The only attenuating factor of the multiplier process of this model is

the propensity to import (z) which determines the increase of income in the normal multiplier manner given an increase in any of the exogenous variables. Velocity (v) simply determines the time-lag of the multiplier process. The coefficient expressing the foreign exchange demand multiplier which gives us the external drain of reserves associated with one unit of domestic credit expansion is:-

$$p = \frac{zv}{1 + zv} = \frac{\Delta NFA}{\Delta DA}$$

Newlyn (107) develops the Polak model for 68 developing countries, among them Kuwait. He estimates the foreign exchange demand multiplier as above (p) and calls it the Polak coefficient. For Kuwait he calculates:-

$$p = 0.41$$

$$z = 0.22$$

$$v = 3.20$$

and he estimates e (the domestic credit expansion multiplier) at 7.90 given the formula $e = (1 + p)m$ and the money multiplier at $m = 5.6$. Newlyn elsewhere (108) estimates these coefficients differently (by using incremental rather than average values) which turn out to be more accurate in developing the effects of monetary policy in a Polak model. In addition Newlyn (109) uses GDP/M2 throughout these studies to measure the income velocity of money. We have seen that in the case of Kuwait non-oil GDP figures need to be used to estimate the velocity of money (110). We have discussed the method of estimation of non-oil GDP which we show along with (v) in Table 3:5. With the adjustments for the calculation of v and the use of the incremental rather than average values we have new figures:-

$$p = 0.25$$

$$v = 1.08$$

$$z = 0.17$$

based on a broader sample than Newlyn's (1962-76). We mentioned earlier (111) that Newlyn did not fully take into account the national characteristics of Kuwait's financial system in particular in relation to the role of liquid foreign assets. With our adjustments therefore for net foreign assets to high-powered money and the bank reserve ratio (112) we reach different conclusions on the incremental money and DCE multipliers than does Newlyn.

$$m = 2.14$$

$$e = (1 + p)m = 2.47$$

The implicit constant velocity of money of the Polak model doesn't seem to be too unrealistic as a short-term factor for the context of our discussions of the demand for money function given the relative unimportance of most opportunity cost variables in the demand for money function (113). The trend for (v) can be seen in Table 3:5. (v) appears to have a downtrend over the period under study, although, if we omit the first three years and the last year of the sample in Table 3:5 the range of (v) drops by almost 60 per cent and short-term fluctuations overshadow the slight downward bias in the trend of (v) . Our oft-repeated scepticism of GDP statistics, and consequently of our results for NOGDP figures for Kuwait, does not allow us to lay too much store by the accuracy of the statistics on (v) . It would appear that the money multiplier is not much lower than the DCE multiplier, implying that the foreign exchange leak is not as great in Kuwait as would ordinarily be assumed.

The results of empirical research would tend to lead us to believe that capital flows are exogenous. This agrees with the results that foreign assets of the banks are not significantly affected by external interest rates. Also overall yields differentials don't seem to affect the money supply except in the very short-term, and consequently we assume as we

did earlier the existence of inducements offered by banks to clients possibly in the form of loan accounts or subsidies of some kind. If yields are rigid, the sharpness of the rise of foreign interest rates is such that the banks find no indirect inducements to match the rises in foreign interest rates. Liquidity then drops rapidly and a vicious circle starts as customers begin to borrow for interest arbitrage purposes. Although interest arbitrage does take place in this manner, it does not seem that the money supply is affected in the long-term because the banking system eventually adjusts relatively quickly to compensate for capital flows. The commercial banks in Kuwait would simply ration out loans, until the liquidity crisis is relieved by the central bank and the government and until they can restructure themselves to offer enough indirect inducements to keep their main client deposits. We shall see in Chapter 4, that to some extent Kuwaiti depositors move into foreign currencies while maintaining their deposits with the same bank. The depositor's gain would, in the short-run, be the bank's loss. In the longer-term, either the depositors could be induced to change their mind, or central bank and government funds might allow the commercial banks to restructure their balance sheets.

The low foreign exchange demand multiplier result for Kuwait agrees with a high growth rate of money supply that we see over the period under study and the importance of the local stock market is attracting a large share of private sector funds after 1972.

267

FOOTNOTES TO CHAPTER 3

- 1) Phillip Cagan, Determinants and Effects of Changes in the Stock of Money 1975-1960, National Bureau of Economic Research (New York : Columbia University Press 1965), pp. 1.
- 2) Milton Friedman and Anna Jacobson Schwartz A Monetary History of the United States 1879-1960, National Bureau of Economic Research (Princeton : Princeton University Press 1963).
- 3) Ibid., pp. 776-798.
- 4) Ibid., pp. 695.
- 5) Ibid., pp. 686.
- 6) See Chapter 4, pp. 230-232
- 7) See R.A. Batchelor and B. Griffiths, "Monetary Restraint through Credit Control : the Case of the United Kingdom", in Competition and Regulation in Financial Markets, ed. A. Verheirstraeten, (London : Macmillan 1981).
see also,
Brian Griffiths, "Base Control : The Next Steps", in The City University, Annual Monetary Review, Number 2, December 1980, pp. 35-45.
and,
Allan H. Meltzer, "Central Bank Policy : Some First Principles", in The City University, Annual Monetary Review, Number 2,

December 1980, pp. 27-33.

- 8) J. Marcus Fleming, "Domestic Financial Policies under Fixed and under Floating Exchange Rates", I.M.F. Staff Papers, vol. 9., No. 3, November 1962, pp. 369-79.

- 9) Arnold C. Harberger, "A Pointer on Inflation", Journal of Money Credit and Banking, vol. x, No. 4, November 1978, pp. 505-21.

- 10) J.J. Polak, "Monetary Analysis of Income Formation and Payments Problems", I.M.F. Staff Papers, vol. 6, No. 1, November 1957, pp. 1-50.

- 11) J.J. Polak and J. Argy, "Credit Policy and the Balance of Payments", I.M.F. Staff Papers, vol. 18, No. 1, March 1971, pp. 1-24.

- 12) The main references on the policy allocation literature include:-
 J. Marcus Fleming, "Domestic Financial Policies under Fixed and under Floating Exchange Rates", op. cit.

Robert A. Mundell, "The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability", I.M.F. Staff Papers, vol. 9, March 1962, pp. 70-79.

H.G. Johnson, "The Objectives of Economic Policy and the Mix of Fiscal and Monetary Policy under Fixed Exchange Rates", Maintaining and Restoring Balance in International Payments, eds. W. Fellner et al, (Princeton : Princeton University Press 1966).

- 13) J. Marcus Fleming, "Domestic Financial Prices under Fixed and under Floating Exchange Rates", op. cit., pp. 369.
- 14) J.R. King, Stabilization Policy in an African Setting : Kenya 1963-73 (London : Heinemann 1979) pp. 65-68 and 91-96.
- 15) J.R. King, op. cit., pp. 98.
- 16) J.J. Polak and Lorette Boissonneault, "Monetary Analysis of Income and Imports and Its Statistical Application", I.M.F. Staff Papers, Vol. 7, No. 3, April 1960, pp. 349-415.
- 17) Arthur Hazelwood, "The Economics of Colonial Monetary Arrangements", Social and Economic Studies, December 1954, pp. 291-315.
- 18) K.P. Wong, "A Monetary Model of Singapore's Monetary Sector", Malayan Economic Review, vol. 19, No. 1, April 1974, pp. 46-63.
- 19) George Betz, "A Note on the Money Supply in Singapore 1957-1966", Malayan Economic Review, vol. 12, No. 2, October 1967, pp. 116-121.
- 20) P.J. Drake, Money, Finance and Development, (Oxford : Martin Robertson 1980), pp. 93-6, 104-7, 110-14.
- 21) P.J. Drake, Financial Development in Malaya and Singapore, (Canberra : Australian National University Press, 1969), pp. 39-40.

- 22) Ibid, pp. 43.
- 23) Ibid, pp. 42.
- 24) Geoffrey Maynard, "The Economic Irrelevance of Monetary Independence : The Case of Liberia", Journal of Development Studies, Vol. 6, January 1970, pp. 111-132.
- 25) Naval Intelligence Division, H.M. Navy, Iraq and the Persian Gulf, (London : HMSO, 1944), pp. 486.
- 26) Arthur Hazelwood, op. cit., pp. 293-294.
- 27) Arthur Hazelwood, op. cit., pp. 312.
- 28) P.J. Drake, Money, Finance and Development, op. cit., pp. 104-7 and 110-14.
- 29) Grove and Exeter, "The Philippines Central Bank Act", Federal Reserve Bulletin, September 1948, pp. 938-949.
- 30) J.J. Polak and L. Boissonneault, op. cit.
- 31) P.J. Drake, Financial Development in Malaya and Singapore, op. cit., pp. 56.
- 32) See this chapter, pp. 84.
- 33) The main references on the inflation tax literature include:-
H.G. Johnson, "A Survey of Theories of Inflation", Essays in

Monetary Economics (London : George Allen and Unwin, 1967).

M.J. Bailey, "The Welfare Cost of Inflationary Finance", Journal of Political Economy. April 1956, pp.93-110.

R.A. Mundell, "Growth, Stability and Inflationary Finance, Journal of Political Economy, April 1965, pp.97-109.

Milton Friedman "Government Revenue from Inflation", Journal of Political Economy, July/August 1971, pp.846-856.

Rosemary Thorp, "Inflation and the Financing of Economic Development" in Latin America in the International Economy. Proceedings of a Conference of the International Economic Association in Mexico City, Mexico (1971), eds. V.L. Urquidi and R. Thorp (London : Macmillan, 1973).

W.T. Newlyn, "Intermediation and Credit Creation", in W.T. Newlyn (ed.) The Financing of Economic Development, ed. W.T. Newlyn, (Oxford : Clarendon Press 1977) pp. 43-63.

a critique of inflationary finance is contained in:-

E.S. Shaw, Financial Deepening in Economic Development (Oxford : Oxford University Press 1973), pp. 95-99.

- 34) W.T. Newlyn, "Intermediation and Credit Markets", op. cit., pp. 43-63.

- 35) E.S. Shaw, op. cit., pp. 95-99.

see also

R.I. McKinnon, Money and Capital in Economic Development (Washington : The Brookings Institution 1973) pp. 37-41, 50,53 and Chapter 7.

- 36) Subrata Ghatak, Monetary Economics in Developing Countries (London: Macmillan 1981) pp. 56.

- 37) E.S. Shaw, op. cit., pp. 114-148, 210-12.
see also
R.I. McKinnon, Money and Capital in Economic Development, op. cit., pp. 14-16.
- 38) J.G. Gurley and E.S. Shaw, "Financial Intermediaries and the Saving Investment Process", Journal of Finance, vol. 11, No. 7, May 1956, pp. 257-276.
see also,
J.G. Gurley and E.S. Shaw, Money in a Theory of Finance (Washington : The Brookings Institution 1960).
- 39) R.I. McKinnon, Money and Capital in Economic Development, op. cit., pp. 57-67.
- 40) D.R. Khatkhate, "Analytic Basis of the Working of Monetary Policy in Less Developed Countries", I.M.F. Staff Papers, vol. 19, No. 3, November 1972, pp. 533-558.
- 41) A.P. Thirlwall, Inflation, Saving and Growth in Developing Economies (London : Macmillan 1974), pp. 79-85.
- 42) Subrata Ghatak, op. cit., pp. 57.
- 43) J.J. Polak, op. cit.
- 44) See this chapter, pp. 95-100.
- 45) K.P. Wong, op. cit.

- 46) George Betz, op. cit.
- 47) See this chapter, pp. 95-100.
- 48) J.J. Polak and L. Boissonneault, op. cit.
- 49) See this chapter, pp. 85-87.
- 50) Ibid. pp. 144.
- 51) Ibid. pp. 165-166.
- 52) J.R. King, op. cit.
- 53) See this chapter, pp. 85-87.
- 54) George Betz, op. cit.
see also,
B.K. Short, Monetary Aspects of the Currency Board and Commercial Banks in Malaya and Singapore 1951-66, mimeograph, School of Oriental and African Studies.
- 55) Phillip Cagan, op. cit., pp. 12 and 17-44.
- 56) Ibid.
- 57) George Betz, op. cit.,
and,
B.K. Short, Monetary Aspects of the Currency Board and Commercial Banks in Malaya and Singapore 1951-66, op. cit.

- 58) See this chapter pp. 96-7.
- 59) P.J. Drake, Money, Finance and Development, op. cit., pp. 86-99.
- 60) P.J. Drake, Financial Development in Malaya and Singapore, op. cit.
- 61) Naval Intelligence Division, H.M. Navy, Iraq and the Persian Gulf, (London : HMSO, 1944), pp. 486.
- 62) See Chapter 1, pp. 26-7.
- 63) M.E. Edo, "Currency Arrangements and Banking Legislation in the Arabian Peninsula", I.M.F. Staff Papers, vol. 22, No. 2, July 1975, pp. 510-538,
and,
J.O. Rouall, "Banking Developments in Kuwait", Middle East Journal, vol. 24, winter 1970, pp. 87-90.
- 64) Ibid.
- 65) See Chapter 4, pp. 209.
- 66) International Bank for Reconstruction and Development (IBRD), Missions Report, The Economy of Kuwait, (Baltimore : John Hopkins University Press, 1964), pp.36.
- 67) M.W. Khouja and P.G. Sadler, The Economy of Kuwait : Development and Role in International Finance, (London : Macmillan, 1979),

pp. 164.

- 68) See this chapter, pp. 90.
- 69) Ibid. pp. 97-98.
- 70) Ibid. pp. 136-161.
- 71) Ibid. pp. 100-103.
- 72) Ibid. pp. 161-165.
- 73) What is meant here is the asset distribution of the foreign assets of the banks.
- 74) Central Bank of Kuwait, Economic Report for 1973, pp. 114.
- 75) See Chapter 4, Graph 4:4, pp.225.
- 76) W.T. Newlyn, "Intermediation and Credit Creation", op.cit., pp. 27.
- 77) Ibid.
- 78) See this chapter, pp. 163-164.
- 79) Central Bank of Kuwait, Economic Report for 1975, pp. 60.
- 80) See Chapter 4, pp. 209-210.

- 81) See this chapter, pp. 111-113.
- 82) Arnold C. Harberger, "Reflection on the Monetary System of Panama", in Chicago Essays in Economic Development, ed. D. Wall (Chicago : Chicago University Press 1977), pp. 158-173.
- 83) Ibid.
- 84) Central Bank of Kuwait, Economic Report for 1972, pp. 155-7 and also Economic Reports for all years through to 1980.
- 85) R.A. Wilson, "The Determinants of Commercial Bank Deposits and Lending in the Gulf", The Arab Gulf Journal, vol. 2, No. 2, October 1982, pp. 77-92.
- 86) Ibid.
- 87) Ibid.
- 88) A.D. Crockett and O.J. Evans, "Demand for Money in the Middle Eastern Countries", I.M.F. Staff Papers, December 1980, pp. 543-577.
- 89) R.A. Wilson, op. cit., pp. 81-2.
- 90) M.W. Khouja and P.G. Sadler, op. cit., pp. 162-89.
- 91) Ibid., pp. 97, 101-102.
- 92) R.A. Wilson, op. cit., pp. 82.

- 93) A.D. Crockett and O.J. Evans, op. cit., pp. 549.
- 94) See Chapter 4, pp. 195-200.
- 95) Central Bank of Kuwait, Economic Report for 1974, pp.60.
- 96) K.P. Wong, op. cit.
- 97) See Chapter 4, pp. 197-198.
- 98) F. Al-Bashir, A Structural Econometric Model of the Saudi-Arabian Economy 1960-70 (New York : John Wiley 1977), pp. 14-20.
- 99) M.W. Khouja and P.G. Sadler, op. cit., pp. 103.
- 100) Central Bank of Kuwait, Economic Report for 1976, pp.47.
- 101) Central Bank of Kuwait, Economic Report for 1973, pp.116.
- 102) C. Hildreth and J.Y. Lu, "Demand Relations with Autocorrelated Disturbances", Michigan State University Agricultural Experiment Station, Technical Bulletin 276, November 1960, pp. 3-76.
- 103) See Chapter 4, pp. 232-249.
- 104) Central Bank of Kuwait, Economic Report for 1975, pp.54.
- 105) See this Chapter, pp. 95-100.

- 106) Ibid. pp. 90.
- 107) W.T. Newlyn, "Intermediation and Credit Creation", op. cit.,
passim.
- 108) W.T. Newlyn, "Financial Interrelationships" in W.T. Newlyn (ed.)
The Financing of Economic Development (Oxford : Clarendon Press
1977), pp. 146-206.
- 109) Ibid.
- 110) See this chapter, pp. 154 and 156.
- 111) Ibid. pp. 124-125.
- 112) Ibid. pp. 123-125.
- 113) Ibid. pp. 145.

CHAPTER 4

THE FINANCIAL INSTITUTIONS AND THE RELATIONSHIP BETWEEN THE BANKS AND THE STOCK MARKET

i) INTRODUCTION

The aim of this chapter is to describe the nature of the institutional structure of the Kuwaiti financial system, and to analyse in detail some of the behavioural functions such as the bank reserve ratio for which we used the symbol (r) , and the public cash preference ratio with the symbol (j) , which were an integral part of the proximate determinants analysis of Chapter 3, but which we were unable to explore in enough depth to allow us to compare theoretical assumptions with respect to these ratios, and the reality behind these assumptions.

In this chapter we shall see in section (ii) how the low public cash preference ratio, which is an important positive contributor to the high money multiplier came about. We shall continue our analysis, in subsequent sections, by discussing the nature of the high bank reserve ratio of the Kuwaiti banks which, until the later years of the period under study, had the opposite (negative) effect on the money multiplier. The remarkable decline in the bank reserve ratio (in its adjusted form) which we can see in Graph 3:3 was an important contributor to the growth of the stock of money. The immediate reason for this decline in the adjusted bank reserve ratio, was the rapid growth in domestic loan demand which enabled the commercial banks to redeploy their foreign assets into domestic lending. Sections (iii) and (iv) look in detail at the commercial banking system in Kuwait. Whereas section (iii) is more of a descriptive institutional presentation of the banking system and

TABLE 4:1

THE FINANCIAL INSTITUTIONS IN KUWAIT
AS AT DECEMBER 31ST 1980

<u>TYPES</u>	<u>NUMBER</u>
Central Bank	1
Kuwaiti Commercial Banks	6
Partly Foreign Commercial Banks	1
Islamic Banks	1
Specialized Banks	3
Investment Companies	11
Independent Foreign Exchange Dealers	2
Stockbrokers	16

KUWAITI COMMERCIAL BANKS (1) (7)

National Bank of Kuwait (NBK)
Commercial Bank of Kuwait (CBK)
Gulf Bank of Kuwait (GULF)
Al-Ahli Bank of Kuwait (AHLI)
Bank of Kuwait And The Middle-East (BKME)
Burgan Bank (BURGAN)

PARTLY FOREIGN COMMERCIAL BANKS (2) (8)

Bank of Bahrain and Kuwait

ISLAMIC BANKS (3) (9)

Kuwait Finance House (KFH)

SPECIALIZED BANKS (4) (10)

Kuwait Real Estate Bank (KREB)
Industrial Bank of Kuwait (IBK)
Credit and Savings Bank (CSB)

INVESTMENT COMPANIES (5)

Kuwait Investment Company (KIC)
Kuwait Foreign Trading Contracting and Investment Company (KFTCIC)
Kuwait International Investment Company (KIIC)
Kuwait Financial Centre
Financial Group of Kuwait
Arab Trust Company
Euro-Kuwaiti Investment Company
International Financial Advisers
Arab Investments for Asia
Arab Financial Consultants Company
Arab Company for Trading Securities

INDEPENDENT FOREIGN EXCHANGE DEALERS (6)

Muzaini
United Trading Group

- (1) All Kuwaiti Commercial Banks are listed and quoted on the Kuwait Stock Exchange.
- (2) BBK is not listed on the Kuwait Stock Exchange and operates one Branch in Kuwait.
- (3) KFH is listed but not quoted on the Kuwait Stock Exchange.
- (4) Of the specialized banks only KREB is listed and quoted on the Kuwait Stock Exchange.
- (5) There are 19 registered companies but only the 11 that are recorded here are of significance. Also only KIC, KFTCIC and KIIC can be said to be significant in terms of balance sheet totals, and furthermore they are the only investment companies that are listed and quoted on the Kuwait Stock Exchange.
- (6) There are 6 recognised independent foreign exchange dealers but only the 2 that are recorded here are of significance in terms of business volume.
- (7) BKME is owned 45% by the government, and BURGAN 51%. BKME replaced the British Bank of the Middle East's branch in Kuwait in 1971.
- (8) BBK is owned 50% by Kuwaiti interests.
- (9) KFH is owned 49% by the government.
- (10) While KREB is almost wholly private, IBK and CSB are government agencies.

its development, section (iv) analyses the reasons the banks held high foreign exchange reserves and the reasons why, subsequently, these reserves were depleted and domestic loans rose. The stock market, it will be seen, was an important source of loan demand and therefore of domestic credit expansion. We shall examine below the nature of the stock market boom, and the attitude of the commercial banks towards it. This and the impact of the stock market on the nature of the monetary process in Kuwait will be discussed in section (v). Finally, in section (vi), bank lending for stock purchases in the U.S. before 1929 is compared with events in the Kuwait stock market before 1982.

Clearly, this chapter is intended to help put some flesh on the bare bones of the theoretical structures we developed in Chapter 3.

ii) THE MONEY MULTIPLIER AND THE PUBLIC CASH PREFERENCE RATIO

Observers of the Kuwaiti economy often claim that its financial system is advanced in relation to other economies in the area, or indeed in the entire developing world (1). This sort of statement could be interpreted in one of two ways. Firstly, if we look at Table 4:1 we can see a wide variety and a large number of financial institutions in existence for a country the size of Kuwait. Such a relatively complex financial marketplace (relative to other economies in the Middle East) certainly possesses the broad features of the sort of financial system we find in most advanced industrialised countries. Secondly, however, we can return to the discussion on the money multiplier which we had in Chapter 3 (2). That this second approach should be considered by us possibly more meaningful than the first, is based on the fact that the money multiplier and its components (and their movements over time)

describe in an abstract fashion the nature of economic behaviour that pervades the economy and underscores its institutional framework. The developed institutional framework in evidence in Kuwait could be merely a copy of financial institutions existing in the advanced industrial economies, and not be organically related to the actual economic development that has taken place in the country. It is not uncommon in developing economies to find a plethora of financial institutions, all government agencies, which continually attempt but fail to involve the private sector in their activities, and which in themselves fail to fulfill a justifiable activity. P.J. Drake in his analysis of securities markets in developing economies noted this (3). Many government agencies and companies, such as insurance and investment companies, banks and development funds would possibly not have existed if they had not been modelled on similar institutions in advanced economies.

Let us pursue, therefore, our second approach. Whereas some previous literature had assessed a fairly high money multiplier for Kuwait in relation to that in other developing economies, (indicating that perhaps Kuwait had a more advanced financial system than those countries), our estimate was much lower (4). Two factors we isolated in our analysis of the money multiplier in Chapter 3, indicated to us that the usual estimates of this figure were not based on correct assumptions (5). Firstly, the money multiplier turned out to be lower than assumed if we took into consideration one of the main theses of Chapter 3 - namely, that the net foreign assets of the commercial banks should be included in the monetary base. The bank reserve ratio was found, quite naturally, to be higher than assumed, if we included net foreign assets in the monetary base. This meant the revised money multiplier estimates we expected, were to be remarkably lower. Infact, had it not been for

TABLE 4:2

THE MONEY MULTIPLIER IN KUWAIT 1963-81
(Millions of Kuwaiti Dinars)

		M2	H	M2/H	H'	M2/H'
1981	IV	3866.0	606.3	6.37	1589.5	2.43
	III	3525.4	431.3	8.17	1477.0	2.38
	II	3385.6	458.2	7.38	1444.5	2.34
	I	2974.7	408.0	7.29	1215.8	2.44
1980	IV	2857.5	473.0	6.04	1218.8	2.34
	III	2758.7	357.6	7.71	1114.6	2.47
	II	2632.4	378.2	6.96	1227.4	2.14
	I	2482.3	315.2	7.87	1073.0	2.31
1979	IV	2289.7	359.2	6.37	962.8	2.38
	III	2247.6	267.1	8.41	802.0	2.80
	II	2038.5	243.8	8.36	801.9	2.54
	I	1986.1	242.5	8.19	849.4	2.34
1978	IV	1950.3	299.7	6.51	912.4	2.14
	III	1845.6	372.4	4.95	941.9	1.95
	II	1724.0	414.3	4.16	926.6	1.86
	I	1611.7	442.6	3.64	900.5	1.78
1977	IV	1583.3	421.9	3.75	824.5	1.92
	III	1443.0	261.7	5.51	692.6	2.08
	II	1405.8	258.9	5.43	666.4	2.10
	I	1312.4	235.7	5.57	659.8	1.98
1976	IV	1220.3	221.5	5.51	572.3	2.13
	III	1145.1	154.2	7.43	613.8	1.86
	II	1101.3	187.8	5.86	664.8	1.65
	I	964.2	186.2	5.15	597.4	1.61
1975	IV	891.2	168.9	5.27	624.3	1.42
	III	823.8	150.9	5.46	612.6	1.34
	II	767.1	197.8	3.88	602.0	1.27
	I	703.5	164.1	4.29	530.5	1.32
1974	IV	720.6	139.6	5.16	557.6	1.29
	III	693.5	133.4	5.19	561.0	1.24
	II	647.0	108.7	5.95	517.8	1.24
	I	606.6	105.0	5.78	494.7	1.22
1973	IV	571.9	98.0	5.83	440.9	1.29
	III	528.7	109.1	4.85	481.2	1.09
	II	513.1	115.1	4.46	471.7	1.08
	I	510.4	79.0	6.46	491.6	1.03

		M2	H	M2/H	H'	M2/H'
1972	IV	493.6	70.9	6.96	480.7	1.02
	III	480.5	69.5	6.91	483.5	0.99
	II	485.3	70.0	6.93	491.2	0.98
	I	432.8	60.7	7.13	449.5	0.96
1971	IV	418.7	58.9	7.11	432.8	0.97
	III	385.0	49.5	7.78	405.3	0.95
	II	389.6	50.9	7.65	398.3	0.98
	I	371.4	49.8	7.46	385.5	0.96
1970	IV	361.8	49.4	7.32	373.3	0.96
	III	354.0	45.8	7.73	361.4	0.97
	II	362.5	49.9	7.26	367.7	0.98
	I	345.2	50.1	6.89	341.2	1.01
1969	IV	378.4	48.0	7.88	338.8	1.11
	III	375.4	47.2	7.95	335.4	1.11
	II	381.1	49.9	7.64	353.0	1.07
	I	392.5	53.0	7.41	357.2	1.09
1968	IV	386.4	54.4	7.10	352.2	1.10
	III	361.8	48.9	7.40	358.5	1.01
	II	357.4	57.4	6.23	369.7	0.97
	I	324.5	53.0	6.12	303.2	1.07
1967	IV	321.6	58.9	5.46	310.3	1.04
	III	328.7	55.8	5.89	327.2	1.01
	II	339.7	61.8	5.50	316.4	1.07
	I	307.0	49.4	6.21	298.0	1.03
1966	IV	305.2	50.1	6.09	304.0	1.00
	III	283.5	43.8	6.47	293.5	0.97
	II	274.0	43.9	6.24	274.2	1.00
	I	227.3	41.1	5.53	227.7	1.00
1965	IV	215.9	37.0	5.83	219.6	0.98
	III	202.7	31.6	6.42	220.8	0.92
	II	196.3	33.2	5.91	194.9	1.01
	I	205.0	34.6	5.93	201.9	1.01
1964	IV	204.9	33.0	6.21	208.7	0.98
	III	194.2	32.0	6.07	193.9	1.00
	II	182.2	34.5	5.28	176.9	1.03
	I	179.5	35.5	5.06	169.0	1.06
1963	IV	177.6	33.5	5.30	168.0	1.06
	III	175.9	31.3	5.62	168.7	1.04
	II	174.4	34.0	5.13	167.1	1.04
	I	176.8	35.5	4.98	172.0	1.03

M2 = Money Supply
 H = High Powered Money
 H' = High Powered Money Adjusted for Net Foreign
 Assets of the Commercial Banks (*1)
 $m' = M2/H' =$ Average Values of the Adjusted Money
 Multiplier (*2)

Source : Central Bank of Kuwait, Quarterly Statistical Bulletin, Nos. from April 1968 - December 1982.

(*1) In Chapter 3 we established it is more useful to look at a figure for Reserve Money which was adjusted to include net foreign assets which was assumed approximated a major part of banks' liquid reserves. This departure from the official categorisations of the monetary statistics was adopted in order to explain bank behaviour and the monetary sector more effectively since the Central Bank statutory control ratio has been a liquidity ratio which includes a major part of banks' foreign assets.

(*2) In the "proximate determinants" approach in Chapter 3, we saw that the equation for the money multiplier was:-

$$m = \frac{j + 1}{j + r}$$

where $r = R/D$ or the bank reserve ratio (bank reserves divided by total deposits), and $j = C_p/D$ or the public cash to total deposit ratio.

Definitions

M2 = currency in circulation (C_p), demand deposits (D_d) and time and savings deposits (D_t).

H = currency in circulation (C_p) and bank reserves (R).

NB R in commercial banks' balance sheets is always smaller than that in the Central Bank's balance sheet. Central Bank sources admitted that where this is the case, the discrepancy is due to the fact that balances held on behalf of the specialised banks was sometimes wrongly added to the figure. The correct statistics are those in commercial banks' balance sheets.

TABLE 4:3

THE MONEY MULTIPLIER (m) (*1) FOR SIXTY-EIGHT
LESS DEVELOPED COUNTRIES (1976)

Algeria	2.18	Libya	2.02
Argentina	2.33	Malagasy	2.43
Bolivia	1.48	Malawi	1.89
Brazil	2.63	Malaysia	2.93
Burma	1.28	Mauritius	3.41
Cameroons	2.48	Mexico	1.53
Chile	1.66	Morocco	2.41
Columbia	2.05	Nicaragua	2.84
Costa Rica	3.27	Nigeria	2.70
Cyprus	2.70	Pakistan	2.28
Dominican Republic	1.96	Paraguay	1.62
Ecuador	1.76	Peru	1.48
Egypt	1.63	Philippines	3.34
El Salvador	2.07	Saudi Arabia	1.57
Ethiopia	2.00	Senegal	2.44
Gabon	2.59	Sierra Leone	2.01
Ghana	1.30	Somalia	1.81
Gambia	1.21	Sri Lanka	1.90
Greece	3.31	Sudan	1.75
Guatemala	2.32	Syria	1.25
Guyana	3.76	Taiwan	3.48
Haiti	1.58	Tanzania	2.83
Honduras	2.93	Thailand	3.11
India	2.39	Togo	2.46
Indonesia	2.02	Trinidad + Tobago	5.35
Iran	2.22	Tunisia	3.04
Iraq	1.29	Turkey	2.09
Ireland	3.26	Uganda	2.88
Jamaica	4.07	Upper Volta	1.92
Jordan	1.52	Uruguay	1.63
Kenya	3.84	Venezuela	2.88
South Korea	3.00	Vietnam	1.90
<u>Kuwait</u>	<u>5.60</u>	Zaine	1.99
Lebanon	4.12	Zambia	3.35

Source : W.T. Newlyn, "Intermediation and Credit Creation",
in The Financing of Economic Development,
W.T. Newlyn (ed.) (Oxford : Clarendon Press 1977)

(*1) $m = M2/C$ in Newlyn's model where:

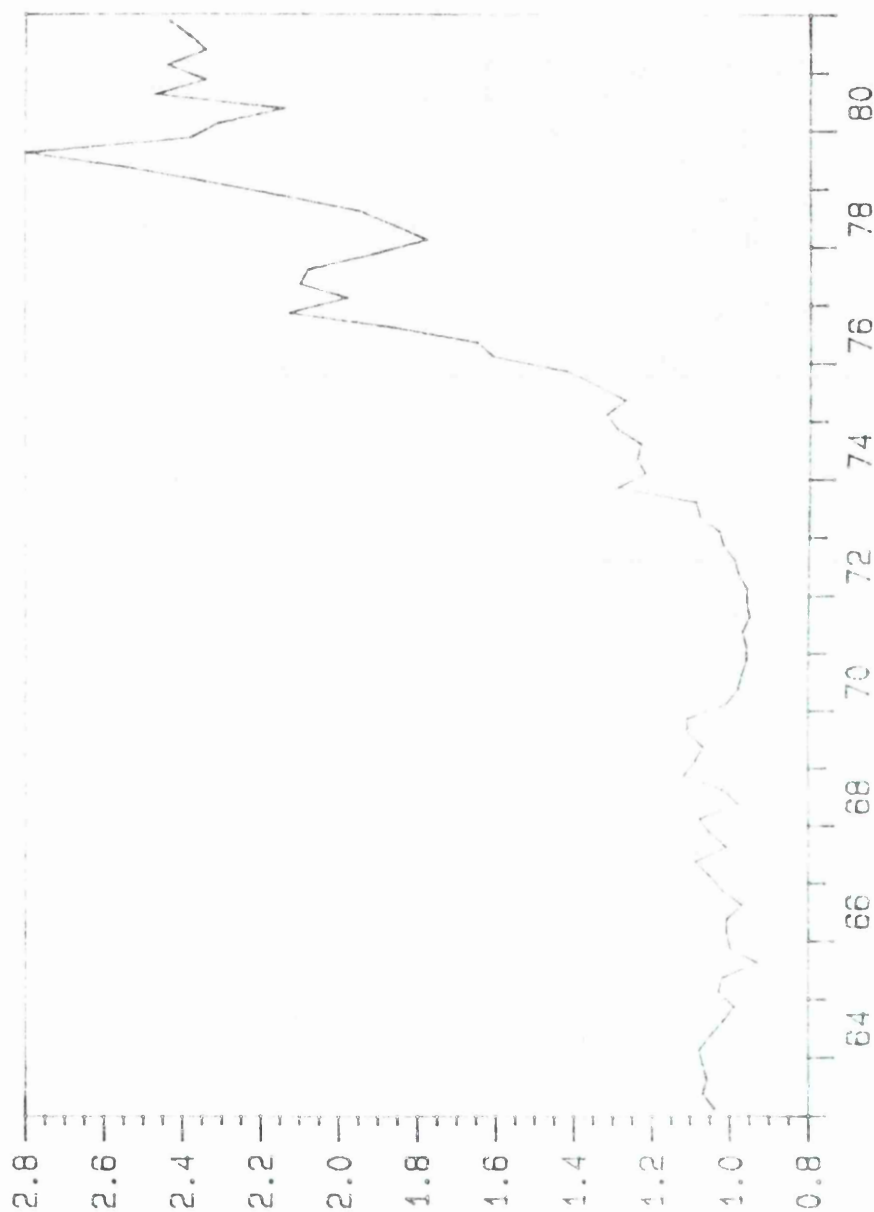
$M2$ = money plus quasi-money, and,

C = currency held outside the banking system
and claims of commercial banks in the
monetary authority.

the low level of the public cash preference ratio itself, they would have been. This public cash preference ratio, which we discussed in our analysis of the proximate determinants (6), and which we considered both in relation to the money supply ($c = C/M2$) and in relation to deposits ($j = C/D$), has typically been extremely low in Kuwait over the period under study, even by international standards. A low public cash preference means a correspondingly higher money multiplier simply because the cash leak from the banking system, into the hands of the public is that much lower. Despite the fact that our estimates of the money multiplier are different to those of others (7), any claim that the financial system in Kuwait has reached an advanced stage of development, can only be based on estimates of behavioural functions such as the public's preference for holding cash and not, as we have seen, on superficial evidence such as the institutional super-structure of the financial system. If, to continue with our example, the public's preference for holding cash is low, there are specific behavioural and social reasons why this is the case. And these reasons, we shall show in sub-section (a) below, have nothing to do with an advanced economy's tendency to save on the use of cash as time progresses (8).

Before we go on to explore these reasons, we show why our estimates of the money multiplier in Kuwait are different to those of others. As we noted in the last chapter, Newlyn worked out the average value of the money multiplier for 68 LDC's and the U.S.A. The results of these calculations are listed in Table 4:3. The lowest value recorded for the money multiplier was that for Gambia (1.21) and the highest recorded value was that for Kuwait (5.60), while the median value was 2.30 and the value for the U.S.A., which was included as a yardstick for the value of money multipliers in advanced economies, was 6.38. If we look at a historical series for the ratio $M2/$ Reserve Money in Kuwait in Table

GRAPH 4:1
THE MONEY MULTIPLIER IN KUWAIT 1963-81



4:2, which represents the money multiplier as it would have been calculated by Newlyn, we can see that it reaches a high in the third quarter of 1979 of 8.41, and a low of 3.64 in the first quarter of 1978, while the median value for the series is 6.07. These figures, which have been abstracted from Table 4:2, are those for the money multiplier based on the unadjusted monetary base. Newlyn's figures for Kuwait are average representative values, however, and his money multiplier (5.60) is fairly close to the median for the historical series, based on the unadjusted monetary base, spanning the period 1963-80. As we saw with the proximate determinants approach (9), the money multiplier is a function of the public's cash preference in the form of the cash to deposit ratio (j) and the banks' reserve ratio (r). Newlyn's model, however, resembles Cagan's algebra (10) where:-

$$M = \frac{1 + c}{c + r}$$

where $c = C_p/D$

and $r = R/D$ (11)

In Table 4:3 we compare Kuwait's money multiplier with those of other developing economies, based on Newlyn's sample for 1976. Kuwait's money multiplier is much higher than that of most other developing economies and relatively close to that of the U.S.A. This result should imply a developed banking system in Kuwait. If we return again, however, to our arguments in Chapter 3, which led to a significant downward revision of the estimate of the money multiplier, we reach different conclusions. In Table 4:2 we see how our adjustments for net foreign assets in the calculation of high powered money affects our estimates of the money multiplier ($M2/H'$). The series for the adjusted money multiplier which spans the period 1st quarter 1963 - 4th quarter 1980, has a high of 2.80, a low of 0.92 and a median of 1.08. However, estimating the function $M2 = mH'$ gives us the incremental value of $m = 2.14$, which we

used earlier to revise Newlyn's initial estimate of (m) as an average value (12). Historically, the money multiplier changed considerably. The influence of a low public preference for holding cash on the money multiplier was offset in the early years of the period under study (1962-72) by an involuntary high bank reserve ratio, but subsequently the bank reserve ratio fell and the money multiplier rose. We can see from Graph 3:4 that the currency to deposit ratio made a small, although stable, contribution to changes in the money stock throughout the period under study, and therefore that movements in the money multiplier (especially after 1972) are almost entirely due to changes in the bank reserve ratio. But the low public cash preference ratio was important in that the money multiplier overall could have been lower, and we address ourselves to this question immediately below.

a) The Low Public Cash Preference Ratio and Its Social Origins

In Chapter 1, we discussed the importance of the merchant classes in the Kuwaiti economy (13). One of the more obvious economic enclaves which has been dominated by the large merchant families is the banking sector. In Table 4:1 we note that in the nineteen years between 1952 and 1971 banking was wholly private-owned in Kuwait. The nationalisation of the branch of the British Bank of the Middle East (BBME) in 1971, allowed the government a 49 per cent shareholding in that bank, which was renamed the Bank of Kuwait and the Middle East (BKME). Rather than this pointing to a growing influence of central government in banking matters, the prohibition of foreign banking in Kuwait which accompanied the nationalisation of the BBME in 1971 was much more an indication of the influence of the merchant families on policy-making in this area. The first banking project which can be directly associated with the central government is the establishment of the Burgan Bank in 1976, in which the central government had a stake of 51 per cent. We shall show

later, that despite the sale of 49 per cent of the shares to a broad number of private sector investors, and despite overt government support, this bank failed to grow at the same rate as the other banks, and failed to develop a sound customer deposit base (14).

The merchant community in Kuwait is ethnically conscious. If Kuwait, as a whole, had not such a small population, and were it not for the fact that that sub-set of the population which controlled its economic life was even this would not be a remarkable fact at all. The 1976 census estimated the population of Kuwait at just over one million, whereas the fourteen families which we reviewed in Chapter 1, who controlled the country's economic life, could not have exceeded 10,000 people. The fact remains, however, that, even in such a small community, differences in ethnic origins of various groups have had a strong impact on commercial life. The large trading families can be divided into three different ethnic groupings, namely those of Saudi, those of Iranian and those of Turkish (Iraqi) origin. More specific to our purpose here, the establishment of the various commercial banks in Kuwait was influenced by these ethnic divisions. The most powerful families in the early days in Kuwait were all from the Onaiza tribe which we saw in Chapter 1 had migrated from the Nejd in Saudi Arabia and these families were all distantly related to the ruling family, the Al-Sabahs (15). This group is the closest one can get to an "establishment" in Kuwaiti society. So it was that the Al-Hamad, Al-Sagar, Al-Bahar, Al-Sayer and Al-Khorafi families were all founders of the National Bank of Kuwait in 1952 (the Al-Ghanim, a prominent trading family, was also a signatory on the foundation document although they don't appear in the bank's board room today). The Commercial Bank of Kuwait was formed eight years later by a slightly different group including names such as Al-Marzook, Al-Shaye', Al-Homaizi and Al-Nafisi but who were also Onaiza. Some of the families

involved in the foundation of the Commercial Bank had been previously involved with the establishment of the National Bank but the names involved in this case were on average different. The same goes to a certain extent for the Gulf Bank, also formed in 1960, but this bank had an important nucleus of founders who were Kuwaiti families of Turkish origin known as the Jiniati (with names such as Al-Mutawa', Al-Saleh, Al-Sultan and Al-Issa). The last fully private sector commercial bank to be formed was the Al-Ahli Bank of Kuwait established in 1967 where we see the founding core of families were Kuwaiti families of Iranian origin known as the Ajemj (with names such as Al-Roumi, Behbehani, Makki-Juma, Ma'refi).

Despite the provision in the charter of each of these banks that directors of the bank should not benefit from credit facilities from the bank in question, which provision is also reflected in the Kuwaiti commercial code, these different groups with their intertwining family connections put most of their business through the bank which they had founded. We shall see later in connection with the central bank's attempts to control the direction of lending by the commercial banks, that the informal business dealings between the members of a single family, and the apparent needlessness of legal documentation to back up such dealings in Kuwaiti society, meant that provisions which were aimed at restricting the borrowings of particular individuals were not enforceable. So it was that the management and credit officers of these banks had little or no influence on the major loans disbursed by the banks, although this began to change gradually as the banks grew in complexity, and the board of directors had to increasingly rely on professional management teams for the running of their banks. But no management team ever was able to change the overall tone of the way commercial banks conducted their business in Kuwait.

Each bank at its foundation had a certain proportion of capital subscribed by the founders. However, in each case a part of the capital was opened to public subscription through brokers. Despite the control exerted by the merchant families in the banks, there was widespread ownership of bank shares among the public which has to some extent been the basis for public trust in the banks. The exceptional price performance of bank shares, which we can see in Table 4:14 for the period 1973-78, made them a frequent leader in major stock market price movements. The social importance of stock market speculation and the outstanding performance of bank stocks helped to turn the names of banks into household names. In general the level of public relations exposure of the banks in Kuwait has been higher than that of any sector including the central government. Increasingly from 1975 each bank employed advertising agents who developed the image of the bank and marketed its services chiefly through television. The market which the banks were competing for and which was still uncommitted by group or family ties, were the expatriates and the bedouin fringe, as well as occasionally the financing of major government contracts. All these factors have conditioned a public - whether originally loyal to the founders of the banks, or whether eventually coaxed into depositing or doing business with them - which has considerably more trust in the banking system than the public in most developing economies.

Despite the historically high level of trading activity in bank stocks, it has been only those shares issued to the public which have had any significant turnover. Those shares still owned by the founding families are jealously guarded as, naturally, have been the attached voting rights. The result of this has been a lower average turnover in bank shares than in any other sector of the stock market, clearly

resulting from the relatively low "float" in these shares, by comparison with the large number of shares originally issued (see Table 4:13). For example, in 1977 the turnover in bank shares on the Kuwait Stock Exchange was 2 per cent whereas the overall market average was 14 per cent. This was one of the main reasons for the exceptional performance of the price of bank shares between 1973-80. This exceptional performance in turn has been an added incentive for the merchant families to continue consolidating their hold on the banks, in addition to the general commercial importance of the banks to their overall business.

b) The Use of Cheques in the Commercial Life of Kuwait

The wide use of chequing accounts by the public for most of their transactional needs, however, is not simply due to the trust of the public in the banks or the strong connections between commercial activity and the banking system through the shareholding structure of the banks, which we have discussed above. A much more important reason of this feature of the banking system, was the overdraft system of lending, a legacy of the British management of banks in Kuwait, which led to the creation of an informal trade credit system based on the discounting of personal cheques (16). Some extracts we can quote from the Central Bank of Kuwait economic reports describe the link between the public's low preference for holding cash and the informal trade credit system based on discounting cheques:-

"The ratio of currency in circulation (currency issued means cash in the vaults of banks) to the GDP continues to be low particularly when compared to similar ratios in the developing countries. Even if

the oil sector contribution to GDP is excluded, this ratio remains within 12-13%, which is almost the same as that of countries having advanced monetary systems. This is probably due to the spread of banking practices and the wide usage of cheques instead of cash, particularly among businessmen" (17).

We see, therefore, that cheques are used in an informal trade credit system, where such cheques, if written by acceptable and well-known merchant names, are endorsable without recourse for payment of goods and services. As we shall see later in this chapter, these cheques also came to be used to settle forward transactions on the stock market by a simple post-dating method (18). We have already seen in Chapter 3, however, that the turnover in cheques is related to the activity on the stock market (19). These widely accepted practices in Kuwaiti commercial life led to a natural preference for using the banking system and writing cheques for all transactions apart from the most insignificant. A low public preference for holding cash was a natural result. We have seen that the reason for such a growth in the use of cheques was linked to the overdraft system of lending, which is described by the central bank in the following extract from one of its economic reports:-

"According to the credit system, banks were bound to give their customers the right to withdraw overdrafts within a limited scale of the credit facilities each year. Most often this arrangement had to be maintained for an indefinite period because the credit facilities were customarily

renewed year after year. Though this practice is in the interest of customers it involves a major shortcoming, namely, it weakens the possibilities for supervision of bank credit and allows for a major portion of the credit facilities to be divided towards unproductive activities, such as speculation on land, other realties and shares" (20).

Chapter 5 will discuss in detail the central bank's attempts to control inflation and speculation and the associated credit pyramid based on the discounting of cheques which grew both within the banking system and outside it, in informal credit markets. Reforming the overdraft system was a pivotal point for those reform attempts, since it had been the main factor which had led to the use of cheques for the extension of trade credit or indeed other forms of credit, as well as to the practice of endorsing and discounting cheques (21). Merchants with overdraft facilities at a bank would draw-down the maximum possible cash amount from their bank accounts and would subsequently avoid paying any funds into these accounts, to ensure permanence of the loan, and to avoid the risk of a forced reduction in their overdraft limit. The lack of lending outlets domestically meant that banks had little choice but to renew such facilities, and they rarely tried to seek repayment, in particular from members of the important merchant families. On the contrary, merchants always sought to increase their limits with the banks. Cheques received in payment for goods and services by merchants would rarely be paid into a bank account and certainly not into overdrawn accounts. Instead the cheques would be endorsed and passed on in payment for other goods and services purchased. The small size of the business community in Kuwait gave this system a credibility based on confidence and personal contact. Cupboards full of cheques in the

offices of the Kuwaiti merchants represented the growing informal credit system, which the central bank subsequently tried to defuse, by legislating that the banking system phase-down overdraft lending in favour of term loans with fixed repayment schedules, as we shall see in Chapter 5.

One of the most worrying aspects of overdraft lending which gave cause for grave concern at the central bank from 1978 onwards, was the fact that not only were overdrafts permanently renewed so as to remain as evergreen loans on the books of the banks, but also that interest receivable on these overdrafts was often never paid in cash, but debited to the customer's account. Continuation by the banks of a policy of capitalization of interest due on overdraft accounts, might have led to technical illiquidity in the banking system and possible consequent insolvency, especially in times of tight liquidity, as for instance in the period 1978-80. Clearly the high liquidity ratio of the banks, which gave their boards and management teams the excuse, as it were, to carry on such policies, was still not sufficient protection to deal with this problem. The nature of lending itself in Kuwait, the central bank was convinced, had to be reformed.

From 1979 onwards, as the stock market surged forward year after year based on a growing amount of forward deals settled by means of post-dated cheques [22], the nature of bank lending became even more dangerous. Banks became interested in the extraordinary yields available in the discounting of personal post-dated cheques which yields were possible because of the premium forward deals commanded over the spot prices in the stock market. In 1982 the central bank forbade the banks outright to continue this practice. As we shall see in Chapter 5, selective controls had previously limited the amount of cheques the

TABLE 4:4

CONSOLIDATED BALANCE SHEET OF THE COMMERCIAL BANKS 1965-80
(Millions of Kuwaiti Dinars)

End Year	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Assets	245.5	531.4	610.6	679.6	736.7	803.4	803.4	1037.6	1300.7	1839.0	2594.7	3278.5	4291.9	5649.1		
Reserves (4)	n.a.	n.a.	6.2	8.5	13.8	26.9	26.9	58.0	67.2	92.4	270.9	122.7	143.3	221.7		
Cash	3.5	4.4	4.6	5.6	4.5	4.7	4.7	5.3	6.1	7.9	10.4	11.3	13.6	17.4		
Balances with Central Bank	n.a.	n.a.	1.6	2.9	9.3	22.2	22.2	52.7	61.1	84.5	260.5	111.4	116.2	106.0		
Central Bank Bills	—	—	—	—	—	—	—	—	—	—	—	—	13.5	98.3		
Foreign Assets	173.3	369.2	439.5	477.9	513.5	479.1	479.1	561.4	616.1	674.9	823.2	1214.2	1407.5	1840.1		
Claims on Private Sector	65.3	141.4	137.1	161.4	187.4	266.3	266.3	361.9	506.7	984.3	1238.5	1559.4	2119.3	2671.4		
Other Assets	3.4	16.4	77.8	32.0	22.0	31.1	31.1	56.3	110.7	137.4	262.1	382.2	621.8	875.9		
Liabilities	245.5	531.4	610.6	679.6	736.7	803.4	803.4	1037.6	1300.7	1839.0	2594.7	3278.5	4291.9	5649.1		
Private Deposits (5)	173.5	334.9	317.3	405.4	466.6	500.8	500.8	638.9	789.5	1091.2	1432.4	1773.3	2073.8	2606.2		
Demand Deposits	57.2	63.4	54.2	60.9	88.6	103.6	103.6	117.9	188.6	264.7	339.7	422.0	410.6	418.4		
Quasi-Money (6)	116.3	271.5	263.1	344.5	378.0	397.2	397.2	521.0	600.9	826.5	1092.7	1351.3	1663.2	2187.8		
Government Deposits	35.8	54.2	80.9	71.6	62.5	50.7	50.7	73.2	87.3	71.0	114.9	99.3	139.9	164.9		
Foreign Liabilities	6.0	78.4	115.6	104.2	103.6	136.1	136.1	143.4	169.0	324.1	419.8	601.5	803.9	1134.3		
Capital and Reserves	15.2	27.3	31.6	36.4	40.8	45.5	45.5	51.0	63.8	88.2	197.4	218.4	268.6	337.0		
Other Liabilities	15.0	36.6	65.2	62.2	63.2	70.3	70.3	131.1	191.1	263.5	430.2	586.0	1005.7	1406.7		

Source : Central Bank of Kuwait Quarterly Statistical Bulletin, Nos. from April 1968 - December 1982

- (1) Contra accounts and inter-bank transactions which are normally included by Kuwaiti banks are excluded here. The figures here are year-end figures.
- (2) As at end March 1965.
- (3) Figures for 1965 and 1969 are not exactly comparable to those of subsequent years due to a different classification of certain of the accounts. Balance sheet records of the commercial banks prior to 1971 are poor and inaccurate.
- (4) Reserves is the sum of cash, Balances with Central Bank and Central Bank Bills.
- (5) Private deposits is the sum of Demand deposits and Quasi-Money.
- (6) Quasi-Money consists of time and savings deposits, private deposits in foreign currency, and Certificates of deposit.

commercial banks could discount, but not sufficiently. It must have been one of the few occasions in economic history that banks would actively participate in an instrument created by an informal credit market, which instrument in turn was partly born from the peculiarities of the banking system.

Clearly from the above arguments we can conclude that the low cash preference of the public was due to peculiar factors, possibly special to Kuwait, which do not encourage us to consider the cash-saving character of the Kuwaiti financial system as being that of an advanced economy.

iii) THE DEVELOPMENT OF THE COMMERCIAL BANKING SYSTEM IN KUWAIT

In the period 1962-72, the low public preference for holding cash was in general off-set by a light involuntary bank reserve ratio, in the determination of the money multiplier. By 1972 the bank reserve ratio, in terms of our definitions in Chapter 3, began to decline due to increased domestic lending and this became the main determinant of the steady increase of the money multiplier in Kuwait. This section will analyze the general progress of the Kuwaiti banks in the period under study and the change in emphasis of business between the foreign and domestic sectors over time. Section (iv) will look more specifically at the management of liquidity and of foreign assets, by the management teams of the banks.

a) A Description of the Financial Institutions in Kuwait

We can see from Table 4:1 that the financial sector in Kuwait comprises, in addition to the Central Bank of Kuwait, six commercial banks - four

TABLE 4:5

ANALYSIS OF THE FOREIGN ASSETS, FOREIGN LIABILITIES
AND DEPOSITS OF THE COMMERCIAL BANKS 1963-80
(Millions of Kuwaiti Dinars)

YEAR / QUARTER		FA	FL	N	FA/TA*	FL/TA*	D	N/D
1980	IV	1880.1	1134.3	745.8	0.39	0.24	2606.3	0.29
	III	1713.3	956.3	757.0	0.39	0.22	2521.7	0.30
	II	1693.4	844.2	849.2	0.41	0.20	2408.8	0.35
	I	1558.5	800.6	757.9	0.40	0.21	2259.5	0.34
1979	IV	1407.7	803.9	603.6	0.38	0.22	2073.8	0.29
	III	1260.2	725.3	534.9	0.37	0.21	2035.2	0.26
	II	1291.7	733.6	558.1	0.41	0.23	1848.8	0.30
	I	1270.3	663.4	606.9	0.42	0.22	1798.4	0.34
1978	IV	1214.4	601.5	612.9	0.42	0.21	1773.3	0.35
	III	939.9	370.4	569.5	0.38	0.15	1667.4	0.34
	II	899.4	387.1	512.3	0.37	0.16	1556.9	0.33
	I	868.6	410.7	457.9	0.37	0.18	1451.4	0.32
1977	IV	822.4	419.8	402.6	0.35	0.18	1432.4	0.28
	III	791.0	360.1	430.9	0.38	0.17	1299.6	0.33
	II	719.9	312.4	407.5	0.37	0.16	1266.0	0.32
	I	690.5	266.4	424.1	0.40	0.15	1175.5	0.36
1976	IV	674.9	324.1	350.8	0.40	0.19	1091.2	0.32
	III	689.0	229.4	459.6	0.45	0.15	1028.7	0.45
	II	621.3	144.3	477.0	0.44	0.10	987.1	0.48
	I	567.4	156.2	411.2	0.46	0.13	858.0	0.48
1975	IV	614.4	169.0	445.4	0.52	0.14	789.5	0.56
	III	591.6	129.9	461.7	0.55	0.12	729.5	0.63
	II	527.7	123.5	404.2	0.52	0.12	673.2	0.60
	I	501.8	135.4	366.4	0.53	0.14	617.4	0.59
1974	IV	561.4	143.4	418.0	0.58	0.15	638.9	0.65
	III	546.6	118.0	428.6	0.58	0.13	614.2	0.70
	II	510.4	101.3	409.1	0.59	0.12	571.2	0.72
	I	481.6	91.9	389.7	0.61	0.12	532.5	0.73
1973	IV	479.0	136.1	342.9	0.63	0.18	500.8	0.68
	III	487.1	115.0	372.1	0.65	0.15	462.4	0.80
	II	481.6	125.0	356.6	0.67	0.17	442.7	0.81
	I	487.0	74.4	412.6	0.72	0.11	449.7	0.92
1972	IV	513.4	103.6	409.8	0.73	0.15	466.6	0.88
	III	504.1	90.1	414.0	0.75	0.13	423.7	0.98
	II	526.2	105.0	421.2	0.76	0.15	424.9	0.99
	I	452.6	63.8	388.8	0.74	0.10	378.0	1.03
1971	IV	477.9	83.1	394.8	0.74	0.13	405.4	0.97
	III	438.2	82.4	355.8	0.75	0.14	340.7	1.04
	II	507.6	160.2	347.4	0.78	0.25	344.0	1.01
	I	406.6	70.9	335.7	0.74	0.13	326.9	1.03

YEAR / QUARTER		FA	FL	N	FA/TA*	FL/TA*	D	N/D
1970	IV	439.5	115.6	323.9	0.75	0.20	317.3	1.02
	III	379.8	64.2	315.6	0.73	0.12	312.0	1.01
	II	362.4	44.6	317.8	0.72	0.09	316.5	1.00
	I	350.7	59.6	291.1	0.72	0.12	299.3	0.97
1969	IV	369.2	78.4	290.8	0.73	0.15	334.9	0.87
	III	326.8	38.6	288.2	0.69	0.08	332.0	0.87
	II	323.4	20.3	303.1	0.70	0.04	336.1	0.90
	I	323.8	19.6	304.2	0.70	0.04	344.9	0.88
1968	IV	315.1	17.3	297.8	0.69	0.04	339.4	0.88
	III	318.7	9.1	309.6	0.72	0.02	317.4	0.98
	II	321.8	9.5	312.3	0.73	0.02	308.5	1.01
	I	258.3	8.1	250.2	0.71	0.02	276.6	0.90
1967	IV	260.1	8.7	251.4	0.72	0.02	269.1	0.93
	III	280.1	8.7	271.4	0.74	0.02	277.2	0.98
	II	266.1	11.5	254.6	0.68	0.03	284.0	0.90
	I	260.4	11.8	248.6	0.72	0.03	263.3	0.94
1966	IV	263.6	9.7	253.9	0.74	0.03	261.0	0.97
	III	263.8	14.1	249.7	0.76	0.04	242.8	1.03
	II	238.0	7.7	230.3	0.74	0.02	234.4	0.98
	I	193.1	6.5	186.6	0.70	0.02	189.8	0.98
1965	IV	191.3	8.7	182.6	0.71	0.03	183.8	0.99
	III	197.3	8.1	189.2	0.72	0.03	173.5	1.09
	II	169.4	7.7	161.7	0.70	0.03	166.5	0.97
	I	173.3	6.0	167.3	0.72	0.02	173.9	0.96
1964	IV	180.8	5.1	175.7	0.74	0.02	175.1	1.00
	III	165.7	3.8	161.9	0.72	0.02	166.1	0.97
	II	146.8	4.4	142.4	0.68	0.02	152.1	0.94
	I	137.7	4.2	133.5	0.68	0.02	147.8	0.90
1963	IV	137.7	3.2	134.5	0.69	0.02	147.6	0.91
	III	140.4	3.0	137.4	0.71	0.02	148.1	0.93
	II	136.3	3.2	133.1	0.71	0.02	145.6	0.91
	I	138.7	2.2	136.5	0.73	0.01	144.8	0.94

FA = Foreign Assets of the Commercial Banks

FL = Foreign Liabilities of the Commercial Banks

N = FA-FL = Net Foreign Assets of the Commercial Banks

TA* = Total Assets of the Commercial Banks (*does not include other assets)

D = Total Resident Deposits of the Commercial Banks
(including demand, time and savings deposits, foreign currency deposits and Certificates of Deposit)

Source : Central Bank of Kuwait, Quarterly Statistical Bulltetin,
Nos. from April 1968 - December 1982.

TABLE 4:6

THE COMPOSITION OF FOREIGN ASSETS OF THE COMMERCIAL BANKS 1973-80
(Millions of Kuwaiti Dinars)

Year/Quarter		Balances with Foreign Banks	Advances of Discounts to Non-Residents	Foreign Investments	Total Foreign Assets
<hr/>					
1980	IV	1436.7	252.7	190.7	1880.1
	III	1234.8	223.8	254.7	1713.3
	II	1254.4	213.1	225.9	1693.4
	I	1206.2	193.3	159.0	1558.5
<hr/>					
1979	IV	1028.9	203.3	175.3	1407.5
	III	928.9	153.8	177.5	1260.2
	II	991.8	121.5	178.4	1291.2
	I	974.7	114.8	180.8	1270.3
<hr/>					
1978	IV	926.4	101.9	186.1	1214.4
	III	683.7	86.9	169.4	940.0
	II	671.4	81.0	147.0	899.4
	I	640.8	86.6	141.2	868.6
<hr/>					
1977	IV	626.1	80.6	115.7	822.4
	III	577.8	88.7	124.5	791.1
	II	500.6	88.8	130.5	719.9
	I	477.2	90.3	123.0	690.5
<hr/>					
1976	IV	459.1	89.2	126.6	674.9
	III	462.0	109.6	117.5	689.1
	II	390.6	115.6	115.1	621.3
	I	346.5	113.5	107.4	567.4
<hr/>					
1975	IV	402.3	116.3	95.8	614.4
	III	375.2	114.8	101.6	591.6
	II	339.8	101.2	86.7	527.7
	I	334.7	89.6	77.5	501.8
<hr/>					
1974	IV	384.1	98.5	78.8	561.4
	III	355.5	97.0	94.1	546.6
	II	316.7	94.4	99.3	510.4
	I	293.1	84.8	103.7	481.6
<hr/>					
1973	IV	293.9	86.7	98.5	479.1
	III	292.1	84.0	111.0	487.1
	II	302.8	72.6	106.2	481.6
	I	325.4	65.3	96.2	486.9

Source : Central Bank of Kuwait Quarterly Statistical Bulletin,
Nos. from April 1968 - December 1982.

TABLE 4:7

ANALYSIS OF THE PORTFOLIO MOVEMENTS AND THE FUNDING
BASE OF THE COMMERCIAL BANKS 1971-80

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Portfolio Distribution										
(1) Claims On Private Sector/Total Assets	0.237	0.254	0.331	0.349	0.389	0.508	0.477	0.476	0.494	0.472
(2) Foreign Investments/Total Assets	0.050	0.113	0.123	0.076	0.074	0.069	0.046	0.057	0.041	0.034
(3) Advances and Discounts to Non-Residents/Total Assets	0.072	0.088	0.108	0.095	0.088	0.049	0.031	0.032	0.047	0.046
(4) Balances with Foreign Banks/Total Assets	0.581	0.501	0.366	0.370	0.310	0.250	0.241	0.282	0.240	0.254
Funding Base										
(1) Total Resident Private Deposits/Claims on Private Sector	2.514	2.489	1.881	1.765	1.558	1.168	1.153	1.137	0.978	0.975
(2) Foreign Liabilities/Total Liabilities	0.153	0.140	0.169	0.138	0.129	0.176	0.161	0.188	0.187	0.200
(3) Deposits in Kuwaiti Dinars/Claims on Private Sector	1.936	2.077	1.529	1.287	1.318	0.991	1.071	1.021	0.811	0.755
Liquidity										
(1) Cash/Total Resident Private Deposits	0.014	0.010	0.009	0.008	0.008	0.007	0.007	0.006	0.007	0.007
(2) Reserves/Total Resident Private Deposits	0.021	0.030	0.054	0.082	0.085	0.085	0.188	0.069	0.069	0.085
(3) Net Foreign Assets/Resident Private Deposits	0.97	0.88	0.68	0.65	0.56	0.32	0.28	0.35	0.29	0.29

Sources : Tables 4:4 and 4:6

TABLE 4:8

**THE DEPOSIT STRUCTURE OF THE COMMERCIAL BANKING SYSTEM
BY TYPE OF DEPOSIT AND SECTOR OF ORIGIN
(1971-80)**

(Millions of Kuwaiti Dinars)

PRIVATE RESIDENT DEPOSITS

YEAR	DEMAND	SAVINGS	TIME	CDs	FOREIGN CURRENCY	TOTAL
1971	60.9	101.6	145.2	-	98.1	405.8
1972	88.6	117.8	182.8	-	77.4	466.6
1973	103.6	140.1	163.7	-	93.4	500.8
1974	117.9	145.8	202.1	-	173.1	638.9
1975	188.6	175.8	303.5	-	121.6	789.5
1976	264.7	204.6	456.2	-	165.7	1091.2
1977	339.7	253.6	737.0	15.0	87.5	1432.4
1978	422.0	313.4	824.0	32.6	181.3	1773.3
1979	410.6	302.1	985.2	20.3	355.6	2073.8
1980	418.4	272.5	1311.2	16.2	587.9	2606.2

GOVERNMENT DEPOSITS

YEAR	DEMAND	TIME	TOTAL	GRAND TOTAL
1971	9.4	62.2	71.6	477.4
1972	4.3	58.2	62.5	529.1
1973	2.3	48.4	50.7	551.5
1974	2.0	71.2	73.2	712.1
1975	1.7	85.6	87.2	876.8
1976	1.7	69.3	71.0	1162.2
1977	2.1	112.8	114.9	1547.3
1978	0.4	98.9	99.3	1872.6
1979	0.1	139.8	139.9	2213.7
1980	0.8	164.1	164.9	2771.1

Source : Central Bank of Kuwait Quarterly Statistical Bulletin,
Nos. from April 1968 - December 1982

TABLE 4:9

CLASSIFICATION OF DOMESTIC BANK CREDIT BY ECONOMIC SECTOR 1970-80

End Year	Percentages										
	1970(III)(1)	1971(III)(1)	1972	1973	1974	1975	1976	1977	1978	1979	1980
Trade	66.3	70.6	35.9	32.8	34.5	35.5	34.4	35.0	29.1	27.3	27.8
Construction	21.1	17.2	23.1	21.7	22.9	21.0	19.6	18.6	18.5	17.3	16.8
Personal Loans	n.a.	n.a.	16.6	19.8	22.1	15.7	20.1	19.8	23.3	27.1	25.7
Financial and other services	n.a.	n.a.	12.2	15.7	13.5	20.3	20.0	20.1	22.5	22.0	21.5
Industry	12.6	12.2	5.0	4.8	4.4	5.4	4.2	4.6	4.8	4.7	6.5
Agriculture and Fisheries	n.a.	n.a.	7.2	5.2	2.6	2.1	1.7	1.9	1.8	1.6	1.7
Total (a)(%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(b)(KD million) ⁽²⁾	134.4	140.3	175.7	246.6	351.7	462.5	849.3	1073.1	1374.5	1917.5	2418.6

Source : Central Bank of Kuwait, Quarterly Statistical Bulletin, Nos. from April 1968 - December 1982

(1) Figures for the 3rd quarter of 1970 and 1971 are not exactly comparable with these of subsequent years due to a different classification system under prior to 1972. It was only in 1971 that the Central Bank recommended the present sectoral credit reporting system for the commercial banks for adoption in 1972.

(2) Differs from the total of commercial bank claims on the private sector by the amount of local investments by the banks and claims on the specialized banks.

TABLE 4:10

GROWTH RATE OF DOMESTIC BANK CREDIT BY ECONOMIC SECTOR 1972-80

	<u>Percentages</u>									
	1973/2	1974/3	1975/4	1976/5	1977/6	1978/7	1979/8	1980/79		
Trade	28.5	49.7	35.4	78.0	28.5	6.5	30.8	28.3		
Construction	31.5	50.7	20.5	71.8	19.6	27.6	30.6	22.8		
Personal Loans	68.0	59.1	(6.6)*	135.4	24.3	50.4	63.0	19.3		
Financial and Other Services	79.5	22.8	97.8	80.8	27.5	43.0	36.2	23.4		
Industry	36.7	31.0	58.9	41.9	39.8	33.5	36.7	17.6		
Agriculture and Fisheries	0.0	(28.9)	8.7	44.4	39.9	25.5	21.9	13.4		
Total	40.3	42.6	31.5	83.6	26.4	28.1	39.5	26.1		

Source : Table 4:9

*brackets indicate a drop

TABLE 4:11

ASSETS AND LIABILITIES OF BAHRAINI OFFSHORE BANKING UNITS 1975-80
(Millions of U.S. Dollars)

End of period	Assets										Liabilities									
	Interbank Funds					Assets					Interbank Funds					Liabilities				
	Commercial					Assets					Commercial					Commercial				
	Loans to non-banks	Bahrain	Other OBUs	Outside Bahrain	Other assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Loans to non-banks	Bahrain	Other OBUs	Outside Bahrain	Other Liabilities	Deposits of non-banks	Commercial banks in Bahrain	Other UBUs	Outside Bahrain	Other Liabilities
1975	-	-	-	-	-	1687	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1976	1734	136	510	3780	54	6214	598	87	510	4939	80	80	510	4939	80	598	128	2012	9629	419
1977	3706	162	2012	9303	518	15701	3513	209	2792	14946	708	708	2792	14946	708	4786	209	4390	15149	918
1978	6166	204	2792	13409	870	23441	7009	410	6707	19927	1892	1892	6707	19927	1892	8530	410	6707	19927	1892
1979	6688	200	4490	15271	1115	27764	37466	-	-	-	-	-	-	-	-	-	-	-	-	-
1980	8493	204	6707	19886	2176	37466	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Geographical Classification									
Assets					Liabilities				
North America					Western Europe				
End of period	Arab countries	North America	Offshore centres	Other	Arab countries	North America	Offshore centres	Other	
1976	2487	13	1129	1241	1344	6214	2578	214	2277
1977	7065	468	3904	1888	2176	15701	5255	419	4995
1978	11688	277	5301	2971	3204	23441	11666	1891	7018
1979	14719	477	6917	2243	3388	27764	16143	828	7873
1980	19770	641	9764	2538	4753	37466	24236	358	9311

Maturity Classification (remaining period)									
Assets					Liabilities				
Up to 7 days					Up to 7 days				
End of period	8 days to 1 month	Over 1 to 3 months	Over 3 to 6 months	Over 6 to 12 months	8 days to 1 month	Over 1 to 3 months	Over 3 to 6 months	Over 6 to 12 months	Over 12 to 36 months
1976	1059	909	1517	1164	445	662	2131	1478	681
1977	2259	4180	3538	2850	826	811	6224	3506	1973
1978	2793	5846	6598	4230	1152	1112	7420	6101	3590
1979	3953	6385	7620	4418	1411	1432	8134	7351	4359
1980	6603	7759	9977	6975	1572	1587	9837	11006	6557

Source : Bahrain Monetary Agency, Quarterly Statistical Bulletin, December 1982

privately owned and two with a government stake (BMKE and BURGAN have a government shareholding of 49 per cent and 51 per cent respectively) – an Islamic Bank, the Kuwait Finance House is 49 per cent owned by the government but is not regulated by the central bank, three specialised banks, 19 investment companies, a number of insurance companies, both local and foreign, and exchange dealers and stockbrokers. By 1980, the six commercial banks had a network of approximately 115 branches, each serving an average of 11,000 inhabitants. Unlike the other Gulf States, where foreign banks are allowed to operate, the expansion of the banking system in Kuwait, as we have already seen, has come about through local initiative, and protected by the laws prohibiting foreign banking. More recently, however, certain foreign banks which are at least 50 per cent owned by Kuwaiti interests were permitted by a special law to open branches in Kuwait (23). The Bank of Bahrain and Kuwait is now the first to operate such a branch. Foreign banks have, nevertheless, been allowed to hold minority equity stakes in Kuwaiti investment companies and other non-bank financial institutions, which explains the rapid multiplication of the number of these investment companies from three to nineteen between 1974 and 1980. These investment companies, however, cannot take deposits from the public, although they are allowed to borrow from the banks to finance their activities.

b) The Foreign Business of the Commercial Banks

We can see from Tables 4:4 and 4:5 the relative historical importance of the foreign part of the commercial banks' activities. We shall be looking at questions related to foreign assets and their deployment in section (iv) of this chapter, when we analyse the portfolio behaviour of the commercial banks. As we shall see there is close interaction between foreign assets and bank liquidity. In Chapter 3 we included net

foreign assets as part of the banks' liquidity on the basis that the major part of foreign assets were in the form of short-term deposits abroad which acted as liquid reserves held against the commercial banks' liabilities and were recognised as such by central bank legislation. Also that part of foreign assets corresponding to foreign liabilities could not be considered as liquid reserves held against local liabilities, hence the use of net foreign assets rather than balances with foreign banks, as the proxy for bank liquidity (24).

Broadly speaking though, the country's oil-related financial surplus in general forced the banks to deploy a large part of their resources abroad. Up until 1972 around 70 per cent of total assets were foreign assets. This proportion, however, kept dropping as local economic activity increased. First the percentage of foreign assets fell to around 50 per cent between 1973-75, and then to around 35 per cent thereafter. Between 65 per cent and 82 per cent of foreign assets, depending on the year in question, consisted of short-term deposits with foreign banks which would indicate that the foreign business of Kuwaiti banks did not concentrate on lending but involved principally the placement of funds for short maturities in the international money markets. The assumption of a close relationship between foreign assets and bank liquidity was justified precisely by these facts. We shall also see that there were no liquid assets available in the local financial system in Kuwait such that large amounts of short-term money could be absorbed and managed domestically.

c) The Bahraini Offshore Banking Units and the Competition
of Domestic Lending in Kuwait

As foreign assets declined, domestic assets rose reflecting the growth

of domestic economic activity after the oil price rise of 1973. But Kuwaiti commercial banks were actually not the only banks to react to the expansion of loan demand in Kuwait in the period 1973-78. In October, 1975, the Bahrain Monetary Agency (BMA), the central bank of the State of Bahrain, announced a new form of limited banking licence which would permit international banks to establish offshore branches in Bahrain. These so-called Offshore Banking Units (OBU's) were designed to attract international banks who wanted to do business in the Gulf region but were unable to establish branches in particular in Saudi Arabia and Kuwait where foreign banking was either restricted, or totally prohibited. Bahrain was at a convenient enough distance from Kuwait for instance for international banks to jump at this opportunity to set up a business base in the Gulf. OBU's were not allowed, unless another charter was granted, to operate a local branch to do business within the local Bahraini community. The purpose of OBU's was that banking operations should be carried out from Bahrain without restriction, either with non-residents or with the Bahraini government and its agencies.

At a BMA board meeting only a few weeks after this announcement, a list of fifteen applications was approved, and then another twelve were also approved in January, 1976. By June, 1976, sixteen OBU's were operating and reporting assets of \$3.5 billion, and by December 1976 twenty-six banks reported assets of \$2.6 billion at their end of year accounts. The OBU's chief areas of business were concentrated, at least in the pre-1979 period, in Gulf currency business and particularly in Kuwaiti Dinars (KD's). They found that short-term funds in KD's were plentiful and available cheaply compared with interest rates paid on time deposits at banks or on commercial loans to Kuwaiti customers and therefore that they could make a sizeable spread by on-lending these funds in Kuwait.

The reason that situation prevailed, as we shall see in the next section, was the fact that up until 1978 interbank placements in KDs by commercial banks in Kuwait were considered liquid assets in the context of reporting criteria to the central bank and that most Bahraini OBU's were branches of acceptable international banks. The commercial banks in Kuwait initially welcomed this demand for funds on the part of the OBU's due to the limited possibilities for the placement of short-term money in Kuwait (which possibilities were restricted to the central bank and the inter-bank market) until it was realised they were using those funds to finance competitive loan offers to Kuwaiti residents. Between 1975 and 1978 Bahraini OBU's financed a significant proportion of increased lending in Kuwait. Estimates, however, on this are sparse but can be assumed by us to be a function of short-term lending to these OBUs by Kuwaiti banks of local currency. Nevertheless, some foreign currency loans were made which would obviously not depend on KD borrowing. Table 4:11 shows that loans and short-term placements to Arab countries rose from \$2.48 billion in 1976 to \$19.77 billion in 1980 and the proportion of total assets placed in Arab countries by OBU's rose from 40 per cent to 52 per cent. Meanwhile, the proportion of total assets which were simply short-term interbank placements averaged 75 per cent for the period 1976-80. The proportion of business done in local currency varied:-

"The regional currency proportion of local business, initially mainly Kuwaiti Dinars but latterly more Saudi Rials, rose from around 20per cent in 1976/77 to around 29per cent in the later years. Most of the remaining business was dollar denominated." (25)

But the regional currency proportion of local business varied mainly

because after 1978 the accent of growth for OBU's was in Saudi Rials, rather than Kuwaiti Dinars in the period 1976-78, since after that time the legislation came out, which discriminated against OBU's in the placement of Kuwaiti Dinars (26). The balances in Kuwaiti Dinars held by Kuwaiti commercial banks with OBU's were KD 49m in 1977, rose to a high of KD 106m in 1978 and fell to KD 65m by 1980. Although these balances were small by comparison with total balances held with foreign banks by Kuwaiti commercial banks (never rising above 11.5 per cent, while actually falling to 4.5 per cent by end-1980), at one point in time they did have serious implications for the competition for domestic lending in Kuwait. Only approximate estimates of OBU lending in Kuwait are possible. In 1978 total private sector lending by commercial banks was KD 1214.2m, while total customer lending by OBU's to the Arab world can be assumed to be \$3 billion on the basis of Table 4:11, and we can also assume that 75 per cent of assets held in the Arab world would have been inter-bank deposits. If we also assume that OBU's in 1978 would have lent Kuwait borrowers a total of three times their Kuwaiti Dinar balances, since as we saw many loans were in U.S dollars, the total amount of lending by OBUs would have reached around \$1 billion (or a third of the \$3 billion of OBU loans to the Arab world). This would have represented in total 25 per cent of all advances and discounts by Kuwaiti commercial banks to residents in 1978. This level of lending was quite large although in other years it would have been much less, because 1978 represented the peak of OBU activity in Kuwait.

d) The Development of Domestic Lending by the Kuwaiti Commercial Banks

The share of domestic bank credit in the total assets of the Kuwaiti commercial banks increased continuously, beginning in 1973 (see Table

4:4). Prior to that date, the share of domestic bank credit amounted to approximately 25 per cent of total assets; subsequently, this figure jumped to close to 50 per cent, reflecting the increased pace of domestic economic activity. For a while, however, the Kuwaiti banks, lacking modern management expertise, and accustomed to the provision of simple short-term overdraft facilities to their customers, were unable to meet the increasing need of companies for medium term funds (overdrafts traditionally accounted for as much as 80 per cent of the banks' loan portfolio). In 1974 the central bank requested the Kuwaiti banks to restructure their lending practices for the reasons we discussed in the last section, and consequently, by the end of 1980, fixed term loans accounted for 45 per cent of total bank loan portfolios, while overdrafts declined correspondingly. The source of commercial banks' funds in the period 1974-78 were mainly in the form of short-term deposits from the public with an average maturity of below two months. This fact obviously had not encouraged the management teams of the local banks to expand their medium-term lending business. Consequently, Kuwaiti companies and borrowers welcomed the approaches made by foreign banks (mainly the OBU's in Bahrain) which had management with considerable international lending experience that could answer many of these borrowers requirements, in particular for project lending. Kuwaiti banks were able nevertheless as we saw above to recapture much of their lost business due to favourable statutory developments, following the central bank's regulations in 1977 excluding all deposits placed with foreign banks from Kuwaiti banks' liquid assets (27).

During most of the period 1970-80, credit to the trade sector was on average slightly over 30 per cent of total bank credit, with the construction, personal loans and financial services sectors each sharing about 20 per cent of the total, and the agricultural and fisheries

sector and the industrial sector each accounting for around 5 per cent (see Table 4:9). Over the same period, however, both the financial services sector and personal loans sector steadily increased their respective shares of total bank credit to approximately 25 per cent each, mostly at the expense of the trade sector's share. This occurred as a result of the mushrooming of local financial institutions in the country, and the increased opportunities for speculative real estate and share market activities (28). It is interesting that, unlike other Gulf countries, credit to the construction sector has been contained throughout the period under study to 20 per cent or less of total domestic credit. Table 4:10 shows that during 1978 and 1979, the personal loans and financial services sectors enjoyed the fastest rates of growth of bank credit. During 1980, however, the growth rate of credit has been more evenly divided among the various sectors, with the trade sector taking the highest share at 28 per cent. Increased cautiousness among the banks in respect of their involvement with the stock market credit system caused this reduced growth in personal loans, as well as loans to financial and other services sectors. This cautiousness was probably due to central bank warnings, but the fact that this kind of lending continued anyway, led to the need for the central bank to impose a total ban on the discounting of personal cheques in 1982.

e) Developments in the Sources of Funds and the Liability Management of the Kuwaiti Commercial Banks

After 1979 Kuwaiti banks became considerably more active in the provision of medium-term loans to their customers denominated in the Kuwaiti Dinar. Banks could not hope to continue lengthening maturities on their loans to customers, without lengthening the average maturity on

TABLE 4:12

NEW BOND ISSUES DENOMINATED IN KUWAITI DINARS (*1)
(Millions of Kuwaiti Dinars)

YEAR	LOCAL ISSUES		INTERNATIONAL ISSUES		TOTAL	
	No.	Amount	No.	Amount	No.	Amount
1968	-	-	1	15(*2)	1	15
1969	-	-	-	-	-	-
1970	-	-	-	-	-	-
1971	-	-	1	30(*2)	1	30
1972	-	-	2	35(*2)	2	35
1973	-	-	2	50(*2)	2	50
1974	-	-	6	40.3	6	40.3
1975	1	5	8	47.5	9	52.5
1976	1	8	16	85	17	93
1977	-	-	8	37	8	37
1978	3	32	15	122	18	154
1979	-	-	14	109.5	14	109.5
1980(*3)	-	-	1	7	1	7
	5	45	74	578.3	79	623.3

Source : Kuwait International Investment Company

- (*1) This includes publicised private placements which number 12.
 (*2) All these amounts relate to money raised for the World Bank.
 (*3) In 1981 five international issues were effected for a total amount of KD 34 million.

their deposits. The banks' deposit base remained short-term as we can see from Table 4:6. In 1980, half of the deposit base was made up of time deposits, principally with a one-year maturity or less, 16 per cent were sight deposits, and 11 per cent savings deposits. The diversification of the banks' sources of funds and the lengthening of the maturities on deposits has been a subject of concern at the central bank for some time. The main purpose of the new liquidity regulation of March 1978 was to try to encourage such a lengthening of maturities (29).

Meanwhile, the growing need for the banking system to strengthen the size of its deposit base in general is clear from the statistics in Table 4:7, which shows that the bank's loan to deposit ratio (calculated as claims on the private sector divided by private non-government deposits) rose to approximately 100 per cent by 1979. We shall see in section (v) that these developments were due to the juxtaposition of rising foreign interest rates against rigid domestic interest rates, which did not allow local deposits to grow as fast as advances and discounts. Advances and discounts were encouraged to grow by the attractive lending opportunities related to forward transactions on the stock market and the discounting of post-dated cheques, as well as arbitrage borrowing induced by widening yield differentials between the Kuwaiti Dinar and the U.S. Dollar. Setting aside foreign currency sources of funds from our calculations of the deposit base, the loans to deposit ratio rose to an exceptional 132 per cent in 1980. We can see from Table 4:7 that the proportion of foreign currency deposits with the commercial banks rose from a low of 6 per cent in 1977, to 22 per cent of total deposits in 1980 as a result of yield differentials. We see later that capital outflows were compensated for by the banks from their borrowing activities abroad (30). Simultaneously, the banks experienced

a substantial narrowing in their spreads as a result of the increased cost of deposits resulting from the need to attract funds, coupled with an interest rate ceiling of 10 per cent. The lucrative yields available from the discounting of forward cheques were almost the only way the banks could redress this situation, and once they had participated, allowed them, as we shall see later, to increase returns on deposits substantially (although not officially) to stem both the switch to foreign currency deposits, and the flight of capital to foreign banks.

Except for the Industrial Bank of Kuwait (which made an issue as early as in 1975) and the Kuwait Real Estate Bank, debentures have not yet figured as sources of medium-term funds for the commercial banks. As we can see from Table 4:12 most issues of debentures in the local capital market have been made on behalf of foreign entities, since the inception of the KD bond market in 1968 when the World Bank raised KD 15 million in the form of 6 1/2 per cent, 20 year notes through Kuwait Investment Company (KIC). Certificates of deposit (CDs) on the other hand, have been more popular and several of the commercial and specialised banks have made issues, on a fixed and a floating rate basis since 1977 but CD issues both in the form of tranche placements and tap issues have not exceeded a total size of KD 100 million, which is an insignificant sum compared with the total deposit base of the banks in 1980 of KD 2.6 billion. The investment companies who floated the tranche issues for the banks found that the public had little or no demand for these issues which were bought chiefly by banks or other financial institutions. The use of these medium-term funding instruments should have become more popular with the commercial banks for them to exploit medium-term lending possibilities and to support these revised lending strategies. CDs were first issued in anticipation of the central bank altering the

liquidity ratio to a graded one, as it did in March 1978. Under this system as we shall see in the next chapter, time deposits with a maturity in excess of one year would not be required to have compensating liquid assets. To this end, the Gulf Bank made a tranche issue through Kuwait International Investment Company (KIIC) and Industrial Bank of Kuwait (IBK) made a tap issue of CDs with maturities of two and three years. However, as these issues were placed largely with other banks and were, therefore, absorbed within the inter-bank market, their basic rationale of attracting depositors to deposits of longer maturity failed, and issues subsequently became infrequent. The failure of CDs to attract investors is clearly consistent with our findings in Chapter 3 that time deposits should be considered, not as being held for investment purposes, but rather for stock market and other financial transactional needs.

The limited success of the CD market and the inability of banks to tap the bond market as a source of funds was due, among other things, to the fragmentation and instability of the money and capital markets in Kuwait. Statute required that loans with maturities in excess of one year bear an all-in annual cost (including commissions and fees) of 10 per cent or under while shorter maturities had lower interest rate ceilings. This meant, quite naturally, that public issues of bonds or CDs also had to abide by this statute. At the same time substantially more interest than this was being paid informally in periods of tight liquidity on short-term time deposits, while short-term time deposits were by their very nature instruments whose real return does not attract as much publicity as, for instance, bonds and CDs, which are negotiable instruments which, in contrast to deposits, have attached and publicly circulated documentation. At the end of 1979, when the U.S. entered a period of restrictive monetary policy, and U.S. short-term rates reached

peaks in excess of 22 per cent per annum, the KD bond market was officially closed, and when it re-opened in 1981 the central bank actually allowed public issues to come to the market with yields in excess of 10 per cent (in this period the issues came in fact with yields ranging between 12.5 per cent and 14.5 per cent). This was justified by the monetary authorities because the borrowers concerned were foreign entities.

Nevertheless, there began to grow in 1980 the exceptional feature of a highly liquid domestic money market, despite high external dollar interest rates. The reason for this, as we saw above, was the exceptional yields offered by the stock market credit system. The stock market generated credit through the discounting of post-dated cheques which yielded at first approximately 25-40 per cent per annum, but which, after 1979, yielded premia in excess of 100 per cent per annum (31). Usually, only the cheques of well-known merchants would be discounted. The availability of such yields within the informal credit structure in Kuwait had the effect, first of all of attracting funds into the country in the face of high external interest rates, and secondly of raising yields in all other investments in Kuwait including deposits, far beyond the legally permissible levels. As Wilson indicated, therefore, and as we have previously discussed, banks would to some extent increase returns paid on deposits to keep funds in the face of high external yields, which they were able to do largely because of the profitability of discounting cheques in the stock market credit system (32). Banks also increased the attractiveness of deposits by making them as short as possible and allowing customers to borrow against them, giving them features almost identical to interest bearing current accounts (33).

The need for the banking system to pay greater attention in the future to liability management is clear from the prolonged periods of liquidity shortage in the Kuwaiti Dinar market between 1978 and 1980 which we discuss in more detail in the next section. Substantial outflows of private sector funds from the KD market, and the switching from Kuwaiti Dinar to foreign currency deposits with the local banks, induced primarily by the large interest differentials between KD and Eurodollar interest rates recurred during this period. The banks reacted to this, but only belatedly. We only really began to see large capital inflows starting in 1980 when stock market prices started to rise after the 1978-79 lull. This boom allowed the banks to raise domestic yields and thereby attract funds back into the country. The large share of domestic credit that went to the personal loans and financial and other service sectors between 1978-80 reflected not only a large amount of borrowing by investors for investment in the stock market, but also borrowing to some extent for interest arbitrage. We can see from Table 4:8 that KD deposits did not grow as fast as lending and that foreign currency deposits grew from a low of 6 per cent in 1977 to a high of 22 per cent in 1980. The high growth of the personal loans and the financial and other services sectors is evidence of continuing and increasing bank involvement with the stock market credit system.

f) The Return to the Expansion of Foreign Business by the Banks

The recent expansion since 1980 of the Kuwaiti banks outside Kuwait seems to be a result of the limited scope for growth locally following a slowing down of activity in the construction and trade sectors caused chiefly by a reduction in port congestion in neighbouring countries. This became more obvious once they adopted the view that lending related to stock market activity was not serious lending and could be dangerous.

Such a major reorientation will have a number of important implications for the Kuwaiti banks. Perhaps the most important is the need for basic structural changes in managerial style and staffing, to cope with the demands of a competitive international environment. We have also seen that most foreign assets are in the form of liquid balances and that active international customer lending and investment is insignificant. A major change in the direction of business to foreign markets would require substantial policy changes and changes in attitude among the banks.

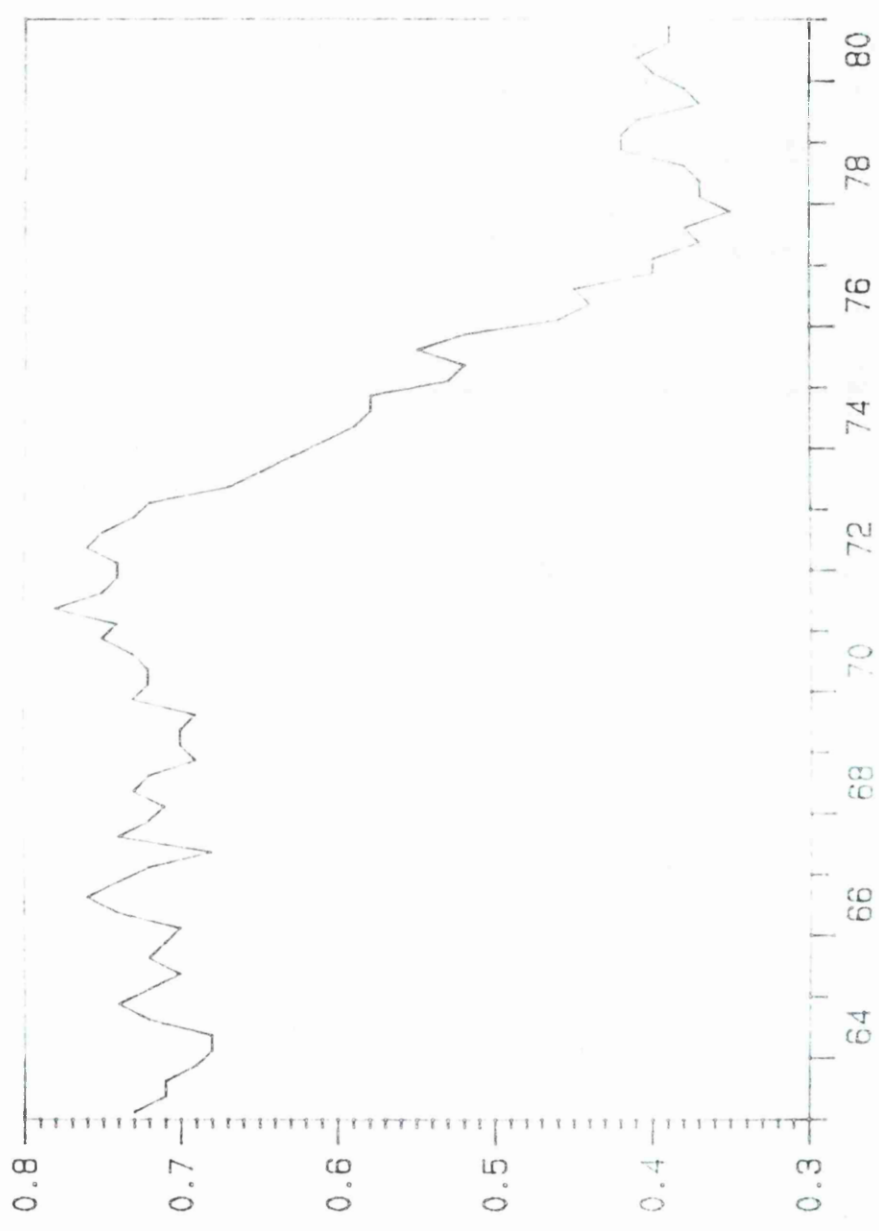
The new interest the commercial banks are showing in expanding abroad, whatever the problems they may face in doing so, seems to bring us full circle back to the situation that prevailed prior to 1973 when foreign assets were the largest part of bank balance sheets and leads us to a completely different objective to those prevailing in the period 1973-79 when expansion of domestic lending at any cost was the primary objective.

iv) PORTFOLIO BEHAVIOUR OF THE COMMERCIAL BANKS

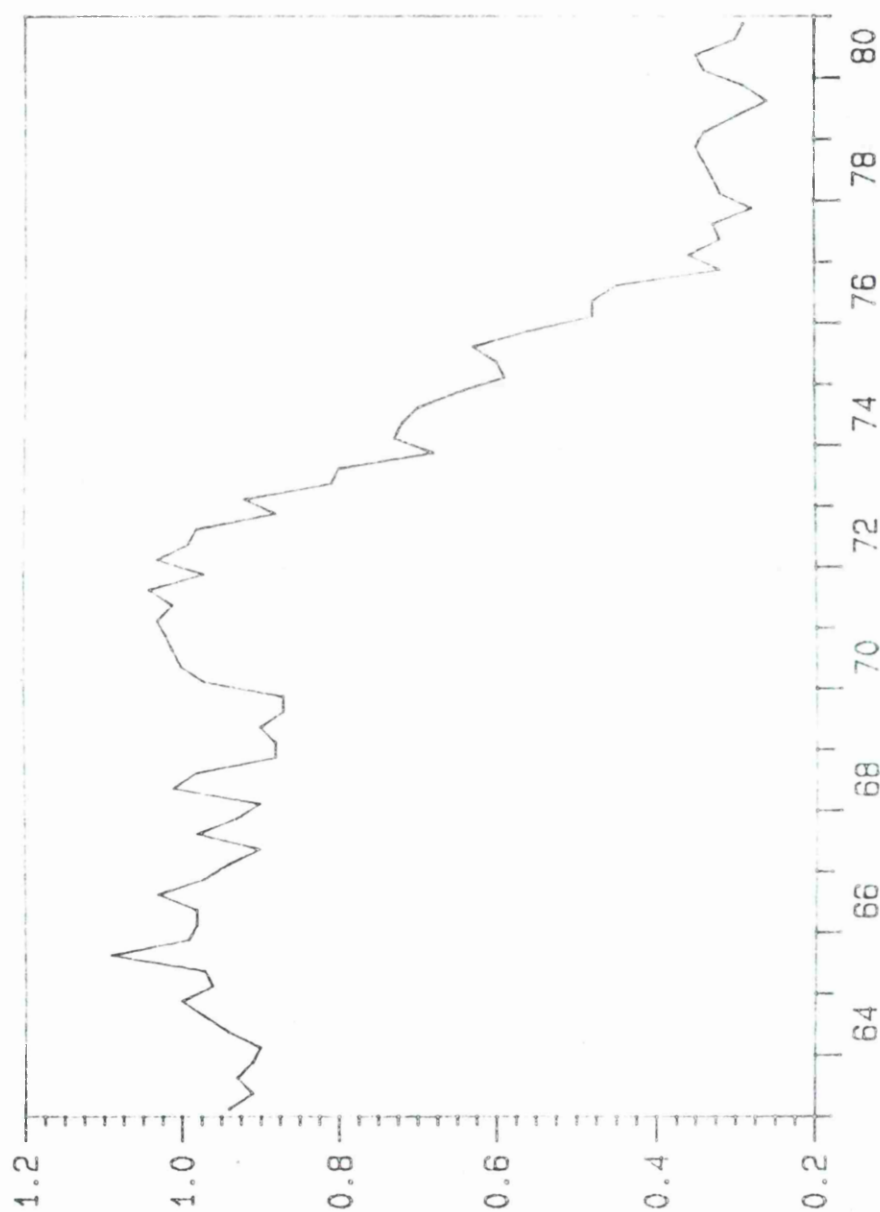
a) Introduction

The central problem discussed in Chapter 3 in the context of the analysis of the determinants of the money stock was the treatment and proper definition of bank reserves (34). A legislated liquidity ratio would have been a natural base around which to build theories about the portfolio behaviour of the commercial banks, but no figures were produced or allowed to be produced on liquid assets held by banks, and no cash ratio became the subject of legislation until the end of the period under study, in June 1980. This, in fact, was the reason for

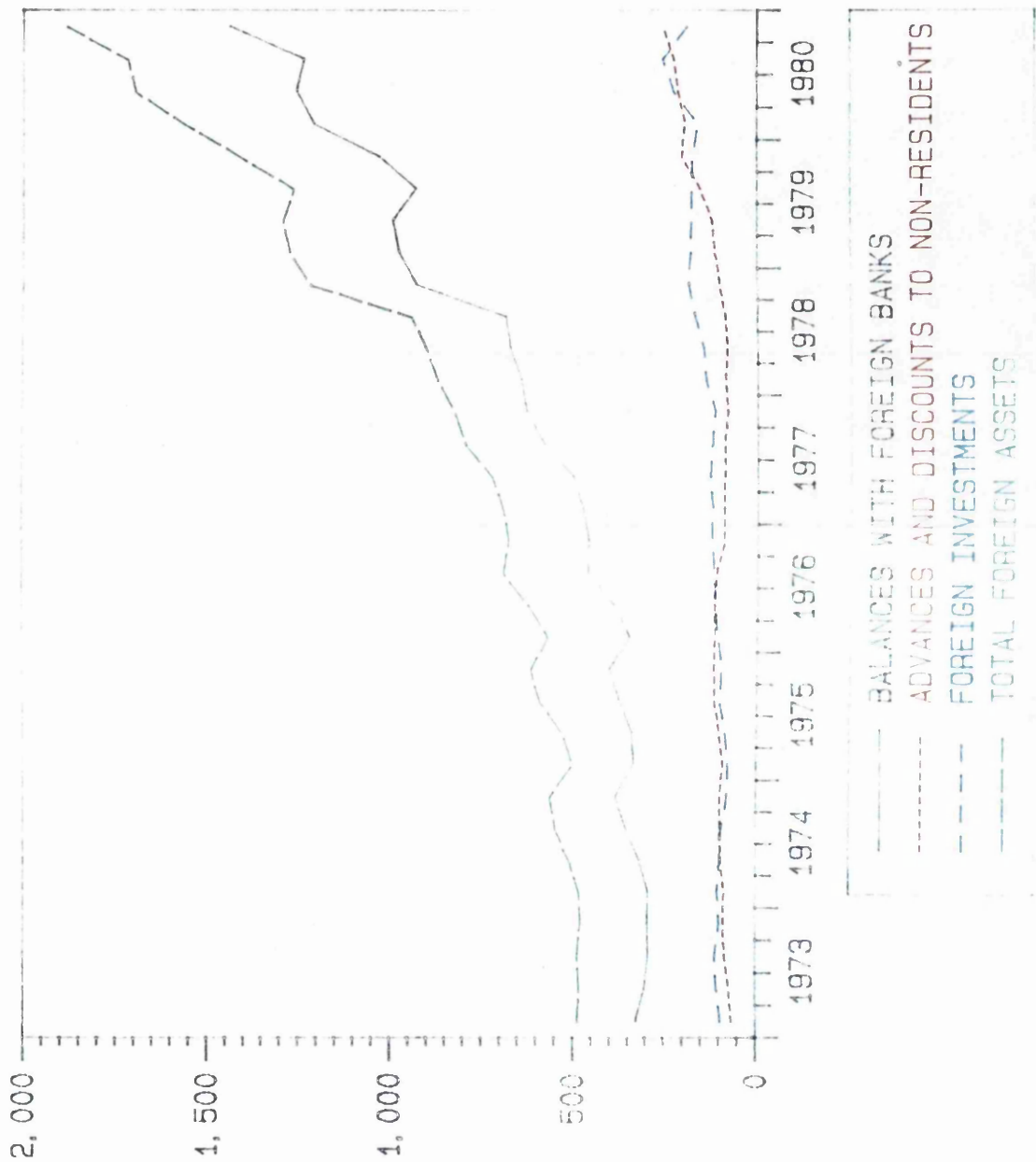
GRAPH 4:2
THE RATIO OF FOREIGN ASSETS OF COMMERCIAL BANKS TO TOTAL ASSETS 1963-80



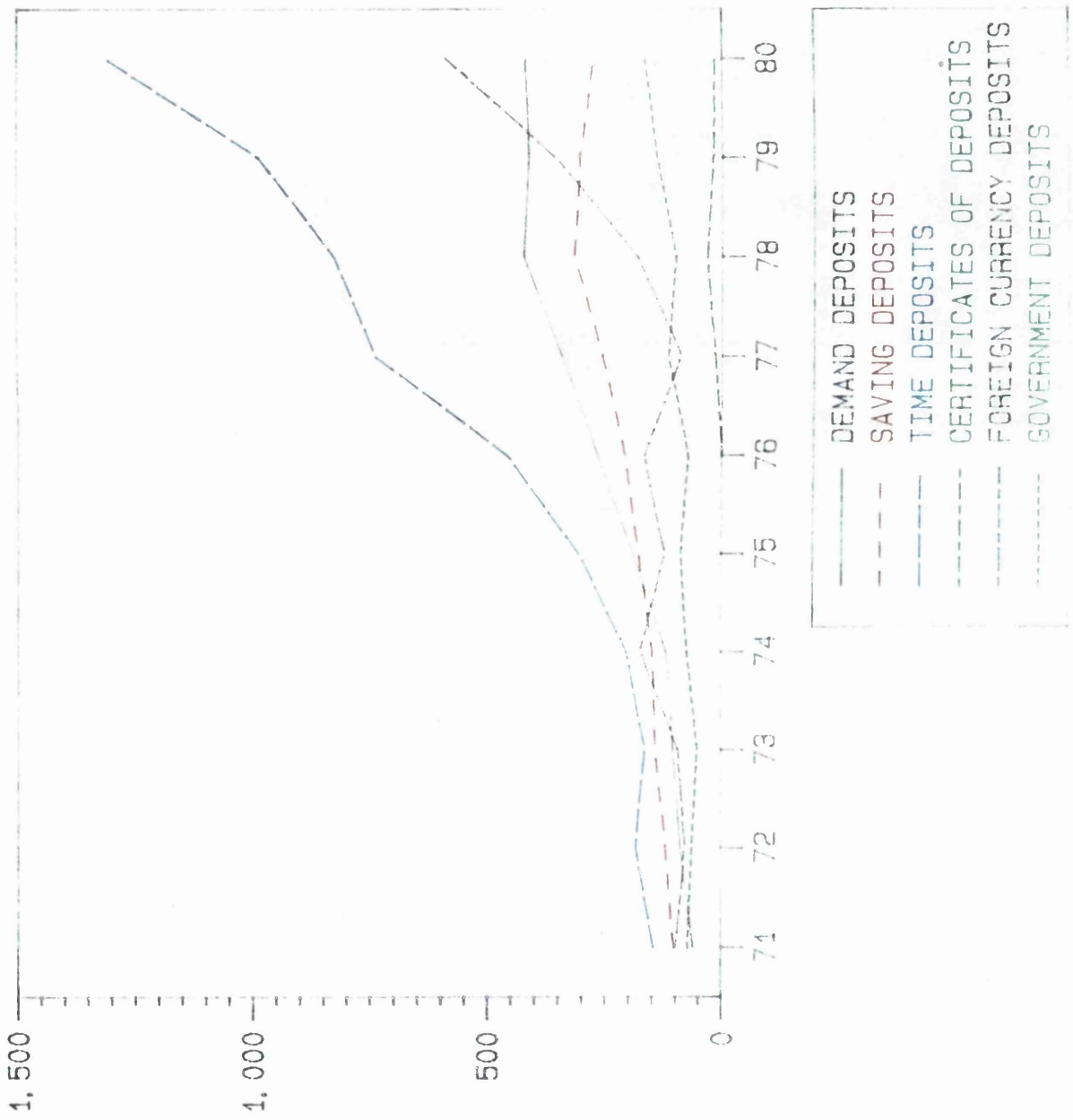
GRAPH 4: 3
THE RATIO OF NET FOREIGN ASSETS OF THE COMMERCIAL BANKS TO DEPOSITS
1963-80



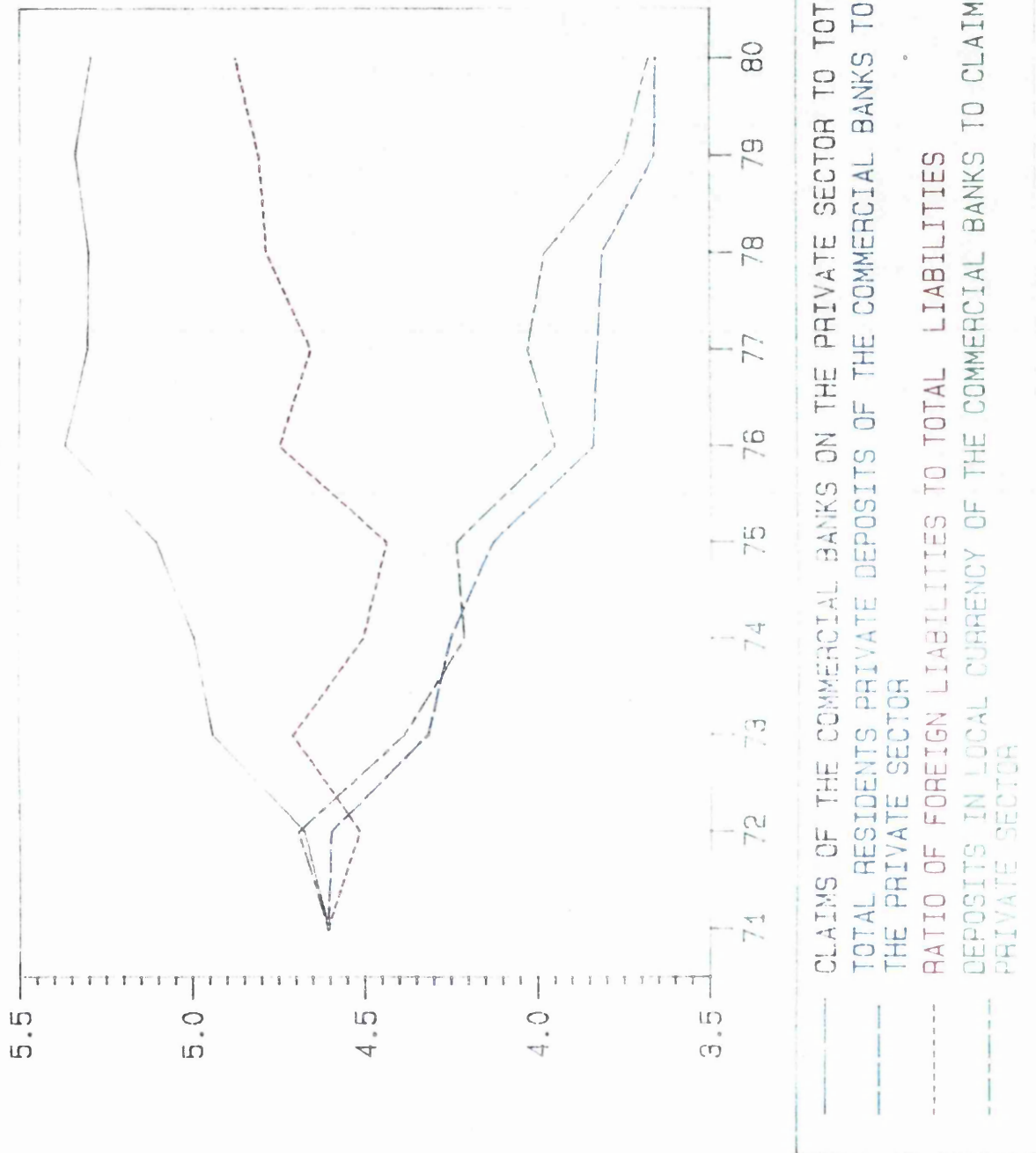
GRAPH 4: 4
COMPOSITION OF THE FOREIGN ASSETS OF THE COMMERCIAL BANKS 1973-80



GRAPH 4:5
DEPOSIT STRUCTURE OF THE COMMERCIAL BANKS BY TYPE OF DEPOSIT 1971-80



GRAPH 4: 6
INDEX OF THE CHANGES IN THE PORTFOLIO BEHAVIOUR OF THE COMMERCIAL BANKS
1971-80



which it was necessary to estimate the true liquidity of the banks by adding net foreign assets to reserves in Chapter 3. In Table 4:7 we can see that the cash ratio (row 8) is changeable and quite insignificant in relation to total resident private deposits. Cash means in this case Kuwaiti Dinar notes and coins. If we add balances with the Central Bank in Kuwaiti Dinars which gives us the ratio of reserves to total resident private deposits (row 9 in Table 4:7) the volatility from year to year becomes spectacular. Clearly we cannot base our analysis of the portfolio behaviour of the commercial banks on their Kuwaiti Dinar liquid assets. Since we have no figures for the liquidity of the banks we had to look closer at what might be our estimates of non-Kuwaiti Dinar liquidity in Chapter 3, that we might reach a global liquidity figure. In Graph 4:4 we can see the composition of foreign assets and clearly balances with foreign banks is the major part. However, the argument we used against using balances with foreign banks as an estimate of non-Kuwaiti Dinar liquidity pointed to the role of foreign liabilities which became an increasingly important source of short-term finance (Graph 4:6). Net foreign assets were therefore used as an approximation of that portion of foreign assets which qualified as liquid reserves for the following major reasons:-

- i) The large size of commercial bank holdings of foreign assets in relation to their balance sheets. In Table 4:5 (Graph 4:2) we see that in the second part of 1971 foreign assets were 78 per cent of total assets, the highest level in the period under study, while the lowest level was reached in the fourth quarter of 1972 and was 35 per cent.
- ii) Most foreign assets, we can see from Table 4:6 (Graph 4:4), were short-term balances with foreign banks (ranging between 61 per

cent and 82 per cent of total foreign assets between 1965 and 1980) and would qualify under the legal liquidity ratio.

iii) On occasion a small part of these balances would be held in short-term deposits denominated in Kuwaiti Dinars with OBU's in Bahrain (primarily in the period between 1976 and 1978) and would therefore additionally qualify under the Kuwaiti Dinar Liquidity ratio.

iv) In Tables 4:5 and 4:7 (Graph 4:6), we can see an increasingly important role being played by foreign liabilities as a source of funds in the short-term for the commercial banks.

In addition to the reasons above, a further reason was cited for the use of net foreign assets in an analysis of the proximate determinants and that was the judgement that the large liquid foreign asset holdings of the commercial banks were in some sense "involuntary" and that after 1972, when domestic loan demand began to grow, these holdings were a crucial building block on which bank management took their lending decisions. This supposition contrasts with the results of Wilson's third test:-

"The highly significant result for foreign liabilities indicates that a major motive for the acquisition of foreign assets by banks in Kuwait is precaution, as there is a desire to avoid open positions in foreign currencies which bring exchange risk" (35)

The purpose of this section of Chapter 4 is to try and discover whether

any systematic picture of bank portfolio behaviour in Kuwait can be reached and if so, whether it is consistent with the conclusions of our analysis so far. A certain amount of theoretical work done on bank portfolio behaviour is of direct relevance here. We noted in Chapter 3, in the course of our discussion of the Friedman and Schwartz models, the possible deficiencies of their kind of mechanistic approach from the behavioural point of view.

b) Implications and Deficiencies of Bank Portfolio Behaviour Thoery

Edgeworth in 1888 (36) first suggested the importance of random deposit variations for the determination of a bank's optimum portfolio, and it was Porter (37) who first applied an inventory model to describe bank portfolio behaviour under uncertainty. Because of its inventory-theoretic roots, this approach has been particularly useful in describing bank demand for excess reserves and other liquid assets. Later work by Orr and Mellon (38), Morrison (39), Charnes and Thore (40), and Poole (41) clearly suggests the theoretical importance of uncertainty, transactions costs, legal and administrative constraints, alternative rates of return, and attitudes toward borrowing in explaining bank demand for secondary reserves. The insights into bank behaviour provided by this group of authors serve to pinpoint the deficiencies in the earlier money supply theory. That theory indicated that with fractional reserve requirements the commercial banking system would expand its deposit liabilities by some multiple of an initial increase in the level of reserves. The size of the multiplier was determined by drains into the Federal Reserve banks, as well as by losses into the public's hoard of currency. Drains of reserves into desired excess reserve holdings and additions to reserves through bank borrowing from the central bank received little attention in the

discussion of credit multipliers. In Chapter 3 we analysed the "proximate determinants" approach of Friedman and Schwartz where the money multiplier depended on the public: cash preference ratio and the bank reserve ratio. But in that model the bank reserve ratio subsumed both voluntary excess reserves (or secondary reserves in the Robinson terminology) and involuntary reserves (or legally required reserves), as well as additions to reserves through bank borrowing. The deficiencies of the generalised approach, whether in fractional reserve models or in the "proximate determinants" model, are clear. The bank reserve ratio is an ex-post equilibrium relation, not a behavioural relation. An explanatory model of bank behaviour can only be found in the specification of this relation as bank demand for excess reserves, or demand for discounts from the central bank change. Brunner (42) in fact, developed a detailed analysis of the supply theory of money based upon an aggregation of such structural relations for individual banks.

We can see one of the fundamental problems with model-building and quantification in the area of bank portfolio behaviour by looking at Markowitz's pioneering study of efficient portfolio selection (43) and at Tobin's paper on liquidity preference (44). Their portfolio approach assumes that an investor's utility function is quadratic in the rate of return. A portfolio is efficient if it is impossible to increase its expected rate of return without raising its risk (or variance). Bankers do operate in a world in which asset rates of return are not known with certainty and in which risk-return characteristics differ among different assets. Further, bankers are likely to be risk-averse, either because their objective functions are convex in discounting future net income, or because influential depositors or regulatory authorities induce them to act in a risk-averse fashion. The application of the theory of portfolio selection to banking cannot yield precise statements

about asset substitutions that banks will make in response to changes in expected rates of return and/or risk. But the approach has important deficiencies as well. The results are sensitive to the specification of the utility function, and stochastic deposit flows cannot be handled as easily as with the inventory approach. Perhaps its greatest deficiency is that investors often do not have the detailed information about individual assets that the theory requires. Further, a bank chooses from a large set of assets with characteristics that cannot be uniquely mapped into the mean-variance rate of return space. The existence of such asset characteristics as loan maturity and borrower guarantees suggests that banks are concerned with many more dimensions of assets than simply the first two moments of the single period distribution of rates of return.

b) The Management of the Foreign Balances and Liquid Assets
of the Commercial Banks

We begin here by outlining certain propositions that we intend, subsequently, to test. These propositions are reached by inspection of graphs while the empirical tests will take the form of multiple regression analysis.

In Table 4:5 we can see that while both net foreign assets and total foreign assets declined in a similar fashion as a proportion of total assets, net foreign assets declined slightly faster due to an increasing proportion of foreign liabilities in banks' balance sheets over time. Meanwhile, balances with foreign banks remained a fairly stable proportion of total foreign assets (45). Foreign liabilities increased in relation to total footings in banks' balance sheets from 10 per cent to 20 per cent by 1980, but grew considerably in relation to foreign

assets which stood at a multiple of 4.6 times foreign liabilities in 1969, but only around 1.6 times by 1980, with the largest drop taking place in 1976 from 3.6 times down to twice the amount of outstanding foreign liabilities, by the end of the year. In 1976, we can see from Table 4:10 the largest jump in domestic credit creation took place, while our analysis of the determination of the money supply shows that in 1976 the drop in the bank reserve ratio including net foreign assets was the largest contributor to the growth in the money supply (46). Both this and the stability of balances with foreign banks as a proportion of total foreign assets suggest that throughout the period movements in foreign liabilities reflect borrowing activity by the commercial banks to replenish their liquid reserves. A clear illustration on this point can be seen in Graph 4:6, where claims of the commercial banks on the private sector as a proportion of total assets grew, whereas the ratios of total deposits and of Kuwaiti Dinar deposits to claims of the commercial banks on the private sector fell between 1971 and 1980. The resulting funding gap in bank balance sheets was made up by foreign liabilities, and these can be seen to be rising over the period in question, as a proportion of total liabilities, with, incidentally, peaks that are coincidental with peaks in the trend of the ratio of private sector to total assets.

While foreign assets declined as a proportion of total assets (47) due to rising domestic demand for funds, foreign short-term placements were gradually transferred into local currency liquid assets mainly because of legislation. The avoidance of exchange risk may have been a motivating factor in building up an inventory of local liquid assets, in the sense that the banks would be seeking to reduce their net foreign asset position, but outlets for short-term investments in Kuwait were limited and this frustrated any attempts to place a large amount of

funds locally. In addition, as we shall see below, the money and capital markets in Kuwait experienced depressed yields relative to the international financial markets during most of the period under study due to the interest rate regulations, and this discouraged investment of liquid funds domestically (48). The availability of foreign exchange cover at the central bank in the form of an albeit limited but useful forward exchange market, allowed a certain amount of hedging of foreign currency assets to go on from late 1977 onwards. As we saw earlier, the willingness of OBU's to borrow KDs in the short-term money market, prior to the legislation of 1979, also helped, but only temporarily.

But, in any event, there always remained sizeable net foreign asset holdings in the commercial banking system, most of which would not be hedged in the forward market. There existed a historical preference by the commercial banks for keeping foreign liquid assets, because of the dangers associated with possible sudden capital outflows associated with rises in foreign interest rates. This point was discussed in the last section of Chapter 3. However, we discovered there, that the country's foreign exchange demand multiplier, or the so-called "Polak coefficient", which gives us the proportion of a given increase in domestic credit expansion which we expect to leak out abroad, has not been unusually high by comparison with other countries. We see, if we compare foreign assets in Graph 4:4, foreign currency deposits of residents with the commercial banks in Graph 4:5, and foreign liabilities as a proportion of balance sheet in Graph 4:6, that they all rise over the same periods. It would seem that the behaviour of foreign assets is determined by a conservative policy of covering bank foreign exchange exposure by matching foreign currency assets with foreign currency liabilities, which is Wilson's argument in his third test (49). However, if we look at Tables 4:5 and 4:8 we see that net foreign assets

are much higher than foreign currency deposits (except for 1980) and that there is no explicable pattern to the ratio between the surplus of foreign assets over liabilities and the foreign currency deposits of the commercial banks. If we include government deposits (which are in foreign currency) with foreign currency deposits of residents and subtract from net foreign assets, we have a surplus of between a high of 192.9 per cent (1972) and a low of -0.9 per cent (1980) with a mean of 93.29 per cent and a median of 98.91 per cent. The importance of this point becomes clear if we say that, if it is true that the commercial banks in Kuwait were trying to avoid foreign exchange exposure, and they had a net foreign asset position of considerable proportions throughout the period under study (and there is no clear relationship between these net foreign assets and foreign currency deposits at the banks), then, as we pointed out above, the natural thing for the banks to do would have been to try and invest these excess foreign balances in Kuwaiti Dinars. As a corollary of this, we can see the attraction, in such a case, of the possibility of depositing short-term liquid funds denominated in Kuwaiti Dinars with the Bahraini OBUs that would be paying higher interest rates than those available in the Kuwait marketplace for these funds. This indicates that a completely different answer to that of Wilson, who saw banks as seeking to place funds abroad to avoid foreign exchange risk, is necessary to explain the foreign currency balances of the commercial banks.

The swap facilities instituted by the central bank in 1979 were a better and more clearly defined attempt to create forward cover for the commercial banks than previous informal attempts to promote a forward foreign exchange market from 1977 onwards, which we mentioned earlier. This seemed, at the time, to answer to the particular concern of the banks. As we shall see below, however, the swap facilities were

inflexible and too small to make any difference to the problem of lack of forward foreign exchange cover (50). We shall see in Chapter 6 the fundamental nature of the problem of the net foreign asset position of the commercial banks, in respect of central bank currency management policy. An important reason for maintaining the stability of the Kuwaiti Dinar, in particular vis-a-vis the U.S. Dollar, would seem to lie in the central banks' inability to develop a large and efficient forward market in the Kuwaiti Dinar which would enable the commercial banks to hedge their foreign currency exposure.

The transfer of liquid assets to the local market which we can see in Table 4:17 was mainly the result of legislation and developments within the central bank. The interest rate structure resulting from the policies of the central bank did not represent a structure remunerative enough in the context of the international marketplace to encourage the banks to switch their short-term balances to the domestic market. The liquidity regulations of 23rd April, 1974, demanded that 7.5% of liquid assets be in KDs whereas the law in March 1978 increased that proportion to 33 1/3% a clear attempt to force banks to switch short-term funds to the domestic market (51). Between March 1978 and February 1979 much of these KD liquid assets were held with OBU's in Bahrain, but as we saw this loophole was discontinued in early 1979. The net financial position of the commercial banks with the central bank should have been in surplus by mid-1979, given these legislative developments. However, high foreign interest rates and capital outflows at this time which considerably reduced the foreign and domestic liquidity of the banks kept them in overall deficit at the central bank (see Table 4:17). We saw over this period, therefore, not only a drop in the bank reserve ratio but also a restructuring of the assets within this reserve ratio due to legislation. As we shall see in the next chapter the reserve

ratio always took the form of a liquidity ratio and there was no attempt by the central bank to establish a cash ratio until June 1980, since fairly adequate cash balances seemed always to be held by the commercial banks. An important aspect of the restructuring of these liquid assets and the legislation connected therewith (we shall analyse this in detail in Chapter 5) was the increased deployment of short-term liquid funds in Central Bank of Kuwait bills (or CBK bills) – the first attempt to create a negotiable short-term Kuwaiti Dinar liquid asset.

d) Empirical Tests of the Relationships between the Foreign Balances and Deposits of the Commercial Banks and Interest Rates

We pursued a certain number of tests related to the observations made above but principally to look at the central question of the determinants of the foreign asset holdings of the commercial banking system. Wilson's third test showed foreign assets not to be dependent on interest rates, but on the other hand to be highly dependent on foreign liabilities and deposits in that order. To begin with, we tested the same expression that Wilson used:-

$$F = a + bD + cL + dI$$

where F = foreign assets of the banks

D = deposits of private residents

L = foreign liabilities of the banks

I = average of daily quotations of
the three-month London Eurodollar
interest rate.

The result of the test was as follows:-

$$F = 107.35300 + 0.30062 D + 0.63933 L + 15.77120 I$$

(31.46730)	(0.04170)	(0.10990)	(3.36877)	- standard errors
(3.41)	(7.21)	(5.82)	(4.68)	- t statistics

$$\bar{R}^2 = 0.991$$

$$N = 36$$

$$COND. = 20$$

whereas the correlation coefficient was indicative of high correlation ($\bar{R}^2 = 0.991$), the Durbin-Watson statistic indicated autoregression in the residuals ($d = 0.98$) since it was lower than the lower critical value ($dl = 1.15$) for an equation with 36 observations and 4 variables. The condition number (COND.) indicated no multicollinearity.

To repeat our description in Chapter 3 of the Hildreth-Lu procedure, it can be briefly described as transforming an equation as follows:-

$$y = a + bx + e$$

to:-

$$y - py_{-1} = a(1 - p) + b(x - px_{-1}) + e^*,$$

it then selects the value of p which minimises the sum of squared residuals in the transformed equation. This procedure helps to obtain a better fit for the regression to allow us to test again for autoregression. The application of the Hildreth-Lu procedure in the above equation led to a better result:-

$$F = 145.80900 + 0.32752 D + 0.61532 L + 9.49562 I$$

(41.86260)	(0.04336)	(0.10327)	(3.77484)	- standard errors
(3.48)	(7.55)	(5.96)	(2.52)	- t statistics

$$\bar{R}^2 = 0.993$$

$$p = 0.60229$$

$$N = 36$$

$$COND. = 9.29533$$

and the Durbin-Watson statistic indicated no autoregression ($d = 1.81$) being above the upper critical value ($du = 1.63$). Both (D) and (L) were significant, although as we can see (L) had a higher coefficient value.

But the interest rate was also significant (although only at the 99.99 per cent level of confidence) contrary to the result of Wilson's third test. Multicollinearity was still absent.

No conclusions could possibly be reached without breaking down these relationships into their components. We can see from Table 4:8 and Graph 4:5 that foreign currency deposits of residents became increasingly important, in particular after 1977. In addition, earlier on in this chapter, it was indicated that the government discontinued the practice of placing Kuwaiti Dinar deposits with the commercial banks, and that after 1972 all government deposits were in foreign currency. Presumably, therefore, there should be some relationships between foreign currency deposits as a whole and foreign assets. We tested this possibility ignoring completely the Kuwaiti-Dinar deposits of residents. We tested the following equation:-

$$F = a + bS + cW + dL + eI$$

where F = foreign assets of the banks

S = foreign currency deposits of residents

L = foreign liabilities of the banks

W = government deposits

I = average of daily quotations of the

three-month London Eurodollar

interest rate.

Earlier, we stated that R.A. Wilson viewed the Kuwaiti commercial banks as conservative because his interpretation of the apparently close relationship between foreign liabilities and foreign assets was that the banks wished to avoid open positions (52). The large net foreign asset positions of the banks, however, made this interpretation intuitively

unappealing to us at first, although it is important to remember the fact that a good part of commercial bank deposits are in foreign currency. Wilson's remark that the close relationship between (L) and (F) is due to the fact that the banks wish not to hold open foreign exchange positions, should presumably hold for the portion of (D) which is held in foreign currency at the banks and also for government deposits which are uniquely in foreign currency, when placed with the commercial banks as opposed to the central bank. So this test was structured to find out the relationship between foreign currency liabilities (not merely foreign liabilities) and foreign assets. It is to be noted that both foreign assets and liabilities of the banks (F and L) occasionally do contain local currency as we have mentioned earlier but not amounts that could be considered to be significant. Interest rates were also added to the test to see whether their importance would vary with the reformulation of the expression. The results of the test were:-

$$F = 279.67000 + 0.65883 S + 0.53598 W + 1.14645 L - 0.66087 I$$

(55.79020) (0.26148) (0.76431) (0.08167) (5.87978) - standard errors

(5.01) (2.52) (0.70) (14.04) (-0.11) - t statistics

$$\bar{R}^2 = 0.985$$

$$N = 36$$

$$COND. = 19$$

although the correlation coefficient was high ($\bar{R}^2 = 0.983$), the Durbin-Watson statistic revealed autoregression ($d = 1.04$) where the Durbin-Watson statistic was lower than its lower critical value ($dl = 1.09$) for an equation with 36 observations and 5 variables.

The Hildreth-Lu procedure was applied, and although the correlation coefficient was high and (S) and (L) were significant, the t-statistic for the interest rate variable was not significant, while that for (W) was marginally significant. Unfortunately, the d-statistic was inconclusive ($d = 1.46$), lying between the lower and upper critical values ($dl = 1.09$, $du = 1.70$).

$$F = 545.27400 + 1.08582 S + 0.62854 W + 0.59792 L - 5.19941 I$$

(210.91300) (0.31971) (0.54905) (0.11849) (5.58089) - standard errors

(2.59) (3.40) (1.14) (5.05) (-0.93) - t statistics

$$\bar{R}^2 = 0.990$$

$$p = 0.97332$$

$$N = 36$$

$$COND. = 2.623$$

Despite the inconclusive result, the insignificance indicated by the t-statistic of (I), induced by the introduction of (S) and (W) into the equation prompted us to test further the relationship between interest rates and the various components of foreign assets to try and assess what possible impact interest rates could have on foreign asset holdings. In our tests, it has been made clear that the interest rate being included as the explanatory variable in these functions, is the eurodollar interest rate and not a differential between foreign and domestic interest rates. We shall see below that the reason for this is that the true remuneration to depositors in the domestic market has not been officially disclosed in any statistics and that even if it were tried, certain of the side benefits being offered to depositors are unquantifiable. We tested for:-

$$B = a + bI$$

$$\text{and } X = a + bI$$

$$\text{where } B + X = F$$

and B = balances with foreign banks

X = investments abroad and advances

and discounts to non-residents

The correlation coefficient in both cases was poor, which is not surprising, given the simplistic nature of the equation, but the

t-statistic for the variable (I) was significant. We therefore expanded the equation as follows:-

$$B = a + bD + cI$$

where B = balances with foreign banks

D = deposits of private residents

I = average of daily quotations of
the three-month London
Eurodollar interest rate

which led to the following result:-

$$B = -84.80320 + 0.42884 D + 17.54230 I$$

(27.46120) (0.01571) (3.56214) - standard errors
(-3.09) (27.30) (4.92) - t statistics

$$\bar{R}^2 = 0.982$$

$$d = 1.29$$

$$N = 36$$

$$COND. = 7.53$$

The Durbin-Watson statistic was inconclusive lying between the lower and upper critical values for the d-statistic ($d_l = 1.20$, $d_u = 1.56$). The Hildreth-Lu procedure was consequently applied leading to the following result:-

$$B = -69.59570 + 0.43510 D + 15.29490 I$$

(35.95420) (0.01970) (4.23796) - standard errors
(-1.94) (22.09) (3.61) - t statistics

$$\bar{R}^2 = 0.984$$

$$p = 0.34625$$

$$d = 1.67$$

$$N = 36$$

$$COND. = 6.269$$

The Durbin-Watson statistic ($d = 1.67$) revealed no autoregression lying between the upper critical value and $4 - d_u$ ($d_u = 1.56$ and $4 - d_u = 2.44$). There was no evidence of multicollinearity. Interest rates were shown to be significant at a high level confidence (99.995 per cent). But they lost their significance once again, when we introduced (S), (W) and (L) into the above expression such that:-

$$B = a + bS + cW + dL + eI$$

where B = balance with foreign banks

S = foreign currency deposits of
residents with the banks

W = government deposits

L = foreign liabilities

After applying the Hildreth-Lu procedure to the initial result, the test yielded the new result:-

$$B = 195.23700 + 0.68282 S + 0.60911 W + 0.60524 L + 1.69791 I$$

(72.83780) (0.27508) (0.50126) (0.13100) (5.43244) - standard errors

(2.68) (2.48) (1.22) (4.62) (0.31) - t statistics

$$\bar{R}^2 = 0.984$$

$$p = 0.86599$$

$$d = 1.82$$

$$N = 32$$

$$COND. = 4.4921$$

The Durbin-Watson statistic revealed no autocorrelation and lay between the upper critical value and $4 - d_u$ ($d_u = 1.71$ and $4 - d_u = 2.29$). There was no evidence of multicollinearity. The t-statistics were as follows for each variable in the equation:-

$$S = 2.48$$

$$W = 1.22$$

$$L = 4.62$$

$$I = 0.31$$

The only variable therefore which had a t-statistic which turned out not significant, was the interest rate (I).

Interest rate differentials and interest rate policy seem, from the econometric tests carried out here, to influence residents' foreign currency deposits with the banking system directly and as we shall see below, this is the conclusion reached by the central bank (53). The influence of interest rates on government deposits is negligible as these deposits depend more on current government project and expenditure programmes than anything else. Meanwhile the influence of foreign interest rates on foreign liabilities is indirect. It takes hold through the impact of rises in foreign interest rates on capital outflows and the consequent drops in the local currency resources of the banks and private sector borrowings which are made for arbitrage reasons and used to invest abroad. These influences strain the liquidity of the banks and they are forced to borrow abroad, thereby increasing foreign liabilities (54). The significant results in the tests for foreign interest rates as a determinant of the level of foreign assets when foreign currency deposits were ignored, indicate that they had an indirect influence through the liability structure of the banks, in the manner we have indicated above. The fact that interest rates do not seem to have a direct impact implies that our earlier view that foreign assets cannot be considered as investments that are managed according to international rates of return is correct and rather that they simply should be regarded as short-term surplus funds held abroad without an outlet in the domestic market. We pointed out in Chapter 3 that the foreign business of the commercial banks are not dominated by a desire

to build up lending and client relationships abroad but rather by the desire to place short-term funds in the international money markets (55). This characteristic of the commercial banks' foreign assets allowed them to be readily run down in the face of rising domestic loan demand and consequent domestic credit expansion.

It would appear that balances held at foreign banks were held as reserves against foreign currency exposure, including that portion of resident deposits in foreign currency (S), government deposits (W) and foreign liabilities (L). As we saw above the results were better for (S) (foreign currency deposits) than for (D) (total deposits) when tested in the foreign asset demand function because the coefficient for (S) was much higher, and substantially higher again than the coefficient for (L). This conclusion, however, is erroneous and in general the results of the econometric tests on the behaviour of foreign assets need to be interpreted in the context of actual experience.

"During 1972 and 1973 the local banks experienced a process of rapid accumulation of surplus funds for which adequate local investment outlets were at certain stages limited" (56).

If we look at Graph 4:2, compared with the situation in 1976, the proportion of foreign assets to total assets was very high in 1972. For a decade the ratio had been moving between 67 per cent and 78 per cent of total assets until 1972 when it started to drop sharply. This downward trend of the ratio of foreign assets to total assets continued until 1976/7. The only year when a clear rise took place in the period 1970-80 was in 1978 and this was due to a large amount of placement of short-term Kuwaiti Dinars with OBU's in Bahrain (57).

"One of the major factors encouraging Kuwaiti commercial banks to expand these transactions is that most of them are expressed in KDs, a fact providing these banks with a foreign investment field free from exchange risks" (58).

Up until early 1979 KD balances with OBU's were calculated among the components of liquid assets. As we showed, this was stopped (59). By 1979 Kuwaiti Dinar balances with foreign banks fell again reducing the importance of foreign assets to the same level as in 1977 (see Graph 4:4).

If we look at Table 4:6 and in particular Graph 4:4, we can see that although foreign assets declined throughout the period, balances with banks remained fairly stable as a percentage of foreign assets although in the period of initial local lending growth between 1973-1976 this proportion dropped from the mid-70% range to the mid-60% range. Foreign liabilities meanwhile, remained comparatively constant (as we can see from Graph 4:6) as a proportion of total liabilities except in the years of liquidity shortages after 1978 when it rose above its previous peaks. The central bank appears to show surprise at the fact that the commercial banks borrow funds from abroad to replenish their reserves when liquidity is strained, although our econometric tests of this relationship below shall show this plainly.

"The rate of growth in foreign liabilities as one of the commercial banks' resources slowed to 34% in 1980 compared to 41% in the previous year, and was pronounced in the liabilities in foreign currencies,

a fact reflecting to a large extent the banks' expanded operations with foreign banks, particularly OBU's in Bahrain. Apparently, Kuwaiti banks resort to borrowing from foreign markets whenever their liquidity is strained" (60).

We tested for the relationship between advances to the private sector and foreign borrowing by setting up a funding equation for the banks as follows:-

$$A = a + b(D - S) + cL$$

where A = advances by the banks to the private sector

D = total deposits by residents

S = foreign currency deposits of residents

L = foreign liabilities

The results of the test were as follows:-

$$A = -185.34200 + 0.74595 (D - S) + 1.23333 L$$

(32.68050)	(0.06626)	(0.13519)	- standard errors
(-5.67)	(11.26)	(9.12)	- t statistics

$$\bar{R}^2 = 0.993$$

$$d = 1.15$$

$$N = 36$$

$$COND. = 14$$

The Durbin-Watson statistic demonstrated the existence of autocorrelation in the residuals and we consequently employed the Hildreth-Lu procedure to reach the following conclusion:-

$$A = 106.68100 + 0.78573 (D - S) + 0.55385 L$$

(256.26200)	(0.09444)	(0.13178)	- standard errors
(0.42)	(8.32)	(4.20)	- t statistics

$$\bar{R}^2 = 0.996$$

$$N = 36$$

$$d = 1.84$$

$$\text{COND.} = 2.0247$$

$$p = 0.97049$$

The Durbin-Watson test showed d lay between $du = 1.56$ and $4 - du = 2.44$ and that no autoregression therefore is in evidence. There was no evidence of multicollinearity. The t -statistic for both local currency deposits and foreign liabilities were significant at the 99.995 per cent level of confidence. Clearly foreign liabilities played an important role in the funding needs of the banks.

Further tests included all resident depositors as an explanatory variable of bank advances to the private sector yielded similar results. Clearly if (D) and (L) were found to be significant explanatory variables in both the foreign asset and domestic asset functions, while there was a considerable change over time in the relative importance of these latter two variables in proportion to total assets, implies that the extremely rapid growth of the commercial banks' balance sheet were an overriding factor and more important in influencing these results, than the changing structure of the balance sheets. We can only appeal to close inspection of the graphs and tables to show the nature of the relationships, where time series summary results naturally hide the short-term changes in the structural relationships. It is clear that whereas foreign assets as a proportion of total assets fell, foreign liabilities as a proportion of total liabilities rose slightly on the average. This in itself is sufficient for us to doubt the thesis that foreign assets were held by the commercial banks as reserves against foreign liabilities. Graph 4:6 corresponds to the funding equation above, and whereas (L) is no more important an explanatory variable than in the foreign asset demand function, we see peaks in foreign

liabilities as a proportion of total liabilities during periods of high domestic credit expansion.

Our thesis therefore stands that foreign assets were "waiting room funds" and not protective cover against foreign exchange exposure. Before the legislation of the period 1978/9 there was a clear lack of availability of instruments at the short-end of the maturity scale in the Kuwaiti financial markets for the development of domestic liquid reserves. The central bank comments on:-

".... the absence of a developed domestic financial market with the consequent placement abroad of a substantial portion of commercial banks' resources" (61).

In Chapter 5 we shall discuss the development of interest bearing deposits at the central bank and swap arrangements. CBK bills were created to replace interest-bearing deposits and to form the basis of a future tool of monetary policy but what is clear is that if it was not for legislation, commercial banks would not have been attracted to those instruments due to the rigid interest rate policy of the central bank.

e) The Impact of Interest Rates on the Banking System
and Developments in the Kuwaiti Interest Rate Regime

Although interest rates can be said not to have been an important factor in the movement in foreign assets over time, interest rates and interest rate differentials continued to have a sizeable impact on the commercial banks' sources of funds as our econometric tests above showed:-

"If it is to be noted that deposits of the private sector are highly vulnerable to developments in world money markets. This was clearly shown through the currency redistribution (of deposits) following the monetary crisis during the fiscal year 1971/2. There was a continuous shift from deposits in foreign currencies to deposits in local currencies" (62)

Table 4:8 shows the various movements in local and foreign currency deposits for the period under study. Also Table 4:16 shows official published borrowing and lending rates of the banks. However, as we indicated earlier, banks would often remunerate depositors with benefits other than the interest rate and would also pay interest above the official published rates. For legal reasons, and faced with the legal lending rate ceiling, they were unable to disclose such arrangements. As a result of this, domestic interest rate data is highly dubious and cannot be used in statistical tests. It is impossible, therefore, to include the implicit interest rate in any econometric tests.

Before 1976 interest rates were determined by an interbank agreement and both lending and deposit rates were changed according to foreign interest rates. In 1969 savings deposits earned 5% and time deposits between 5.5% and 6.5% depending on the maturity of the deposit which ranged between 3-12 months (where the minimum size for a time deposit was KD 20,000). On 1st January, 1971, the time deposit rate was decreased to a range between 5.25% and 6% and on 1st January, 1972, it was decreased again to between 4.25% and 5%. On 1st July, 1972, the time deposit minimum amount was reduced to KD 1,500 from KD 20,000 and

the length of maturities extended out to 5 years. The new interest rates applicable at this time ranged between 3 5/8% for 3 months and 5 1/2% for 5 years. On 1st December, 1974, two categories of time deposits were created, one between KD 1,500 and KD 100,000 and the other over KD 100,000. The new range of interest rates was fixed between 4.5% and 6.25% depending both on the maturity and the type of the deposit.

Meanwhile interest rates on savings deposits remained at 5% up until 1st February, 1972, and then fell to 4%. On 1st August, 1972, the interest rate on savings deposits was reduced to 3.5% then increased again to 4% on 1st December, 1974. Interest rates, although agreed upon entirely by the commercial banks without interference, were managed by the commercial banks strictly within the context of the 7% legal maximum on loan interest. By 1976, the central bank was in control of interest rates, however. Under article 166 of the Kuwaiti Commercial Code - Law No.2 of the year 1961 - the maximum contractual interest rate for loans was set at 7%. In November 1976 this article was amended by decree No. 102 of the year such that the 7% ceiling was abolished and the central bank given discretion to set the rate suitable for its monetary policy with the approval of the ministry of finance required in the case of each alteration.

As we shall see in Chapter 5 this was part of the central bank's plan to reform the money and capital markets together with the reserve and liquidity management of banks [63]. The central bank had previously seen local interest rates as too rigid and was dissatisfied because they remained within the province of the commercial banks and were not under its control. However, despite rises in foreign interest rates in the period 1978-80 the central bank did not raise local interest rates. The central bank decided on:-

"... maintenance of the local interest rate structure, especially as regards the KD lending rates governed by the legal ceiling, despite strains resulting from the sharp upward trend in international interest rates (64).

The strain on liquidity as we can see from Table 4:17, was taken up partially by central bank injection of cash. Table 4:16 shows us that officially the spreads between borrowing and lending rates did not change for the banks in the period of tight liquidity although the official picture is far from the true picture. What helped the system to survive this period in addition to the central bank cash injections was the ability of the commercial banks to increase the return paid on time deposits and perhaps even, as we have seen, to be flexible about the nature of deposit thereby making it even more attractive. Our thesis has been that time deposits in Kuwait have been more similar to interest bearing current accounts than time deposits in advanced financial systems. Meanwhile, the banks were able to do this because of their increased lending within the context of the stock market credit system which afforded extremely high yields as we have seen in the section on the stock market.

During the period 1976-80 when foreign assets declined as a proportion of total assets, we also saw a rise of a local inter-bank market which included the Bahraini OBUs until the legislation of 1979 came out which effectively excluded them from it. The inter-bank market began after the law of 23rd April, 1974, which instituted the first liquidity ratios, and outstanding balances in this market rose from almost nothing to KD 748m by the end of 1980 (13.2% of total assets and up from KD 500m

in 1979 and KD 305m in 1978). Much of the activity of this market was with the specialised banks which had borrowing and lending requirements with the commercial banks. Investment companies and other financial institutions not considered part of the inter-bank market and were treated as customers by the banking system. However, some commercial banks did meet a proportion of their KD requirements from the inter-bank market. The largest amount of funds being supplied in the inter-bank market came from the older established banks that had a solid deposit base, in particular the National Bank, whereas the newer banks and in particular Burgan Bank were usually net borrowers. The newer and smaller banks, and this was not limited to Burgan Bank, but included also Al-Ahli and Gulf Bank which had a deposit base, were the most hard-hit in periods of strained liquidity due to the necessity of tapping the inter-bank market for relatively costly funds. As a result, these banks were more prone to entering the stock market credit system in order to boost their incomes.

f) Overview of Commercial Bank Behaviour

It may seem that due to the lack of data the implied rate of interest in Kuwait, despite the official data presented in Table 4:16, it would be well-nigh impossible to quantify in the context of clearly-defined models bank portfolio behaviour in Kuwait. This has not been the only obstacle. As we saw earlier, the lack of data on the banks' liquidity ratio is another major obstacle which we confronted in chapter 3 and the solution to which allowed us to draw more useful conclusions.

We have already seen the importance of stochastic models in pinpointing deficiencies in the type of money supply theory that indicated that with fractional reserve requirements, the commercial banking system would

expand its deposit liabilities by some multiple of an initial increase in the level of reserves. However, this assumes that the bank reserve ratio remains stable. We can see from Graph 3:3 that the bank reserve ratio, in our adjusted form, is far from stable. In fact in the period before 1972 it was sometimes over 1.0, which would imply a fractional contraction rather than multiplication of deposits in those few cases. After 1972 the bank reserve ratio fell drastically. The stochastic models we discussed in the introduction of this chapter allowed for drains of reserves into desired excess reserves and additions to reserves through bank borrowing from the central bank. After 1978, this would be applicable in the case of Kuwait, however, prior to 1978 our analysis has indicated that the bank reserve ratio was determined by domestic credit expansion and not central bank legislation or desired excess reserves.

A related point to this discussion of the bank reserve ratio is the question of the commercial banks' foreign liabilities. At first sight it would seem strange that a banking system with a high level of foreign assets should borrow abroad rather than convert foreign into domestic assets when necessary. There are three separate reasons for this behavioural pattern observed in the period under study:-

- 1) Foreign assets as we have indicated in chapter 3 act as liquid reserves to the banking system. We can see from Graph 4:3 that they have declined considerably since 1972. In Graph 4:6 we can see that foreign liabilities as a proportion of total liabilities have risen. In this sense foreign liabilities are used, and having increasingly been used since 1978, as a method of replacing reserves. In the U.S. the federal funds acts as a lender and borrower of excess reserves between the banks, and

using this as an analogy of the behaviour banks in the market for foreign bank borrowing would not be out of place.

- 2) In chapter 5 the short-term nature of deposits with the local commercial banks in Kuwait is discussed. The average of the Kuwaiti banks' liabilities is extremely short despite the rather high apparent level of time and savings deposits. Most "quasi-money" is made up of time deposits with extremely short maturities. It could be that in certain instances, even if Kuwaiti commercial banks were not in need of replenishing liquid reserves, they would borrow funds from the Bahrain or London inter-bank markets for maturities up to one year, to improve the average life of their liabilities. To liquidate short-term foreign assets to make medium-term domestic loans would worsen an already precarious transformation ratio in the Kuwaiti banking system.

- 3) To some extent also, foreign liabilities would be incurred as opposed to foreign assets being liquidated, if the loan envisaged by a particular bank at a particular juncture were to be disbursed in a currency which that bank was short of to the extent that a certain amount of foreign exchange expense minimization might have taken place, it would also affect the need for the banking system to incur foreign liabilities.

In discussing the Friedman and Schwartz models in chapter 3 we saw that even in developed economies there are expectational factors at work in certain periods which make the predictive ability of well-defined models of bank behaviour unsatisfactory. In section (vi) we shall discuss the role of the commercial banks in the U.S. in the stock market crash of

1982 and the ensuing depression. It is clear from that section that the bank reserve ratio in the U.S. depends on the public preference for holding cash and that when a crisis of confidence occurs these two behavioural functions feed on each other to create massive contractions in money supply, without the interference of the monetary authorities. The central role of the stock market in domestic credit expansion in Kuwait will require that we look closely at a comparison with a, *prima facie*, similar experience in the monetary history of the U.S.

v) THE STOCK MARKET

Some introductory points on the stock market have already been discussed in Chapter 1. We pointed out in that chapter, that the stock market had been actively encouraged by the government since the early days of its history (during the period 1961-1979), and that it had been used as a mechanism for the transfer of wealth to the private sector to promote local industry and to help to reduce or perhaps even reverse the outflow of private wealth which was, as the World Bank commented, the inevitable result of the land acquisition programme (65). We also quoted studies describing the nature of market imperfection. The average investor could "consistently beat the market" on the stock exchange in Kuwait. This so-called inefficiency was clear at the expense of the government which intervened to support the market on occasions while pursuing a policy of investment in certain sectors of the market in any case. The result was an effective method of redistributing wealth to the private sector which either sold on shares to the government fairly expensively or which was occasionally boiled out of its speculative follies.

TABLE 4-12

CAPITAL HISTORY OF THE KUWAIT COMMERCIAL BANKS
LISTED ON THE STOCK EXCHANGE 1962-79 (1)

Bank	Foundation Year	Starting Shares 1962	1966	1967	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
NK ⁽²⁾	1962	262,000	393,000	550,200	550,200	675,000	742,000	881,000	1,000,000	1,000,000	1,000,000	1,210,000	1,815,000	19,455,875
OKK ⁽²⁾	1960	280,000	280,000	280,000	280,000	400,000	400,000	480,000	560,000	560,000	1,120,000	1,792,000	17,136,000	18,144,000
CLLF ⁽²⁾	1960	330,000	330,000	330,000	330,000	330,000	330,000	330,000	396,000	544,500	636,175	989,262	9,000,000	10,080,000
AALJ ⁽²⁾	1967	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	230,000	350,000	700,000	9,000,000	12,000,000
BAWE ⁽²⁾	1971	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	400,000	400,000	600,000	8,000,000	9,600,000
KREB ⁽²⁾	1973	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	755,868	8,314,540	9,101,408
BURQAH	1976	10,000,000									10,000,000	10,000,000	10,000,000	9,994,961

Source : Ministry of Commerce, Kuwait.

(1) This shows the effect of rights issues, bonus issues⁽³⁾ and stock splits.

(2) For definitions of these abbreviations see Table 4-1 under caption "Kuwait Commercial Banks".

(3) Issues in Kuwait, unlike practice in the U.S. and the U.K., involve the accounting transfer from hidden reserves to the capital caption in the balance sheet of the banks.

TABLE 4:14

**CAPITALIZATION OF THE KUWAITI COMMERCIAL BANKS
ON THE STOCK EXCHANGE 1973-8
(KD millions as of 31st December)**

Bank	1973	1974	1975	1976	1977	1978 ⁽³⁾
NBK ⁽¹⁾	101.0	93.5	105.0	429.9	179.68	280.9
OKB ⁽¹⁾	34.2	33.6	53.7	156.8	155.9	237.8
GULF ⁽¹⁾	29.3	26.6	47.0	101.4	89.7	154.3
AHLI ⁽¹⁾	17.8	15.6	22.5	66.5	71.4	151.2
BKME ⁽¹⁾	11.8	10.6	28.4	68.0	78.4	112.8
KREB ⁽¹⁾	19.5	15.7	23.0	57.5	51.3	81.9
BURGAN ⁽¹⁾⁽²⁾						97.3
(A) TOTAL MARKET CAPITALIZATION	213.6	195.6	179.6	680.1	626.4	1116.2
(B) TOTAL NOMINAL CAPITAL AND RESERVES ⁽⁴⁾	45.5	91.0	63.8	89.2	197.4	218.4
RATIO OF A TO B	4.69	3.83	2.81	7.62	3.17	5.10

Source : Ministry of Commerce, Kuwait, and Table 4:13

- (1) For definitions of these abbreviations see Table 4:1 under caption "Kuwait Commercial Banks".
- (2) Burgen Bank although founded in 1976 was not listed, as required by law, until 1978.
- (3) These figures are for end-August 1978.
- (4) As per Table 4:4

TABLE 4:15

KUWAIT STOCK EXCHANGE ALL-SHARE INDEX 1973-79

Month/Year	1973	1974	1975	1976	1977	1978	1979
January	100	163.90	148.22	208.05	466.07	356.11	580.25
February	97.69	163.35	149.69	211.38	445.96	326.97	584.55
March	99.17	165.70	154.96	237.92	480.21	368.72	597.45
April	101.31	159.90	151.30	273.28	468.30	416.40	606.04
May	104.70	165.21	162.36	303.35	462.96	429.62	595.30
June	114.09	163.41	155.75	307.30	433.37	431.67	598.00
July	135.58	164.13	158.23	317.91	430.63	466.90	633.98
August	161.90	163.41	163.68	342.48	433.91	494.36	709.20
September	189.01	162.82	163.82	391.95	421.63	558.63	719.95
October	154.37	163.27	183.38	403.02	404.44	625.67	757.55
November	159.25	154.03	187.59	486.41	349.44	595.88	736.06
December	164.09	150.67	209.31	472.35	336.00	591.00	704.90

Source : Ministry of Commerce, Kuwait

TABLE 4:16

**WEIGHTED AVERAGE OF PUBLISHED INTEREST RATES PAID
ON DEPOSITS* AND CHARGED ON DISCOUNTS AND ADVANCES
TO THE PRIVATE SECTOR 1971-79**

(Percentages)

YEAR	TIME AND SAVINGS DEPOSITS	ADVANCES AND DISCOUNTS
1971	5.5	7.5
1972	3.9	6.6
1973	3.8	6.6
1974	4.9	6.8
1975	5.2	7.0
1976	5.6	7.2
1977	6.4	8.0
1978	6.0	8.0
1979	7.9	9.5

Source : Central Bank of Kuwait

*Does not include current accounts

TABLE 4:17

NET FINANCIAL POSITION OF COMMERCIAL BANKS
WITH THE CENTRAL BANK 1969-81
(Millions of Kuwaiti Dinars)

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
A. Central Bank of Kuwait (CBK)													
claims on banks	-	-	-	-	-	-	4.5	2.0	20.7	31.1	397.8	599.9	449.0
1. Discounts and Rediscounts	-	-	-	-	-	-	4.5	2.0	20.7	30.6	195.3	298.6	282.4
2. Swaps	-	-	-	-	-	-	-	-	-	0.5	202.5	301.3	166.6
3. Loans	-	-	-	-	-	-	-	-	-	-	-	-	-
B. Commercial Banks													
Claims on CBK	2.1	1.6	2.9	9.3	22.2	52.7	61.1	84.5	260.5	130.4	149.7	237.5	375.8
1. Balances with CBK	2.1	1.6	2.9	9.3	22.2	52.7	61.1	84.5	260.5	130.4	136.2	129.5	208.4
2. CBK bills	-	-	-	-	-	-	-	-	-	-	13.5	108.0	167.4
C. Net Position (B-A)	2.1	1.6	2.9	9.3	22.2	52.7	56.6	82.5	239.8	99.3	-248.1	-362.4	-73.2

Source : Central Bank of Kuwait, Quarterly Statistical Bulletin, Nos. from April 1968 - December 1982.

a) The History of Government Intervention in the Stock Market

Public flotations of new issues for companies began with the National Bank of Kuwait in 1952 (see Table 4:13) and was followed by the flotation much later of new issues for the Commercial Bank and the Gulf Bank in 1960, and the Al-Ahli Bank in 1961. But, trading in the outstanding shares in the market was limited until the 1970's, while, as we indicated in Chapter 1, no official records of trading exist before 1973.

The all-share index can be traced from 1973 onwards as we can see in Table 4:15 and in Graph 4:7. There follows a brief history of development in the Kuwait stock market which will enable us to substantiate the broad statements we made so far about this market, in particular, relating to the phenomenon of government support. The first bull market occurred in 1973, but the market at the time was still in its infancy and the first major bull market developed in 1976. The market leaders during this period of rising stock prices were the three main local property companies, followed by the insurance and investment companies, all of whom owned substantial real estate developments in which they made most of their profits. Banks and industrial companies lagged the rest of the market in the 1976 bull market. Much of the liquidity available for investment by the private sector in stocks during this period originated from the cash compensations paid to investors after the nationalisation of the Kuwait National Petroleum Company (KNPC) which was acquired by the government in late 1975 at the going market price. This was a clear case of government stock purchases in the open market. An important feature of the latter part of the stock market during 1976 was the growing number of forward transactions

which we discussed in Chapter 3 and which we had noted then had had an impact on the number of cheques cleared in the banking system. Forward transactions tended to be effected for settlement within 6 - 12 months from the transaction date at a 25 per cent per annum premium over the spot price per share. The all-share index rose by 133 per cent between January and November 1976 on a turnover volume of around KD 950 million.

Company results announced early in 1977, however, generally fell short of market expectations. One of the property companies in particular, United Real Estate, ran into trouble. At the same time all the major banks proposed to do rights issues totalling KD 84 million to increase their capital base. The result of all these and other developments was a marked weakness in the market throughout 1977. In September 1977 there was a brief rally in the prices of shares, at the time when the government allotted shares in the newly formed United Arab Shipping Company (UASC) to the former shareholders of Kuwait Shipping Company which had been taken over by UASC. The take-over had initially increased liquidity in the hands of the investing community. By this time, however, the full effect of the forward deals entered into during 1976 began to be felt. Most forward stock purchases had been transacted at premia of around 25 per cent over the prices ruling in the period October/November 1976. A year later the all-share index had fallen by 20 per cent. There ensued a number of bankruptcies among investors which followed quickly after the presentation for payment of the post-dated cheques used to effect those forward transactions.

The clearest case of government support occurred during the stock market slump of 1977-78. Although the government affected the market previously, as we saw in the case of the KNPC take-over for instance, no previous overt and general price support scheme had been set up in the

stock market after a period of declining prices. By late 1977 pressure on the government from the merchant families grew, and strong representations for official support in the stock market were made. Both the Minister of Finance and the Governor of the Central Bank at the time held that it was not their business to rescue speculators from the consequences of their own folly. Nevertheless, it was decided by the cabinet of ministers that some action must be taken to help the stock market, and accordingly a price support scheme was established which set a floor price for each share at which the government brokers, Kuwait Foreign Trading Contracting and Investment Company (KFTCIC) would be prepared to buy those shares. The immediate result of these measures was an upturn in the last week of 1977. In all, the government disbursed KD 150 million during the four months the fund was operating, two-thirds of which went on the purchase of shares in just four companies - United Real Estate, Gulf Insurance, National Automotive and Livestock Trading.

Further measures were taken by the market-place to promote a recovery in stock prices. Several of the major listed companies, and primarily the banks (whose shares stood at very high unit prices) voted to split their shares to a nominal value of KD 1 in March 1978, so multiplying the number of outstanding shares in the case of each company by a factor of seven and a half to ten times, depending on the company in question. The government's vacillation in giving its approval for the stock splits took some of the potential speculative steam out of the market in the period March-April 1978. By summer, however, after the government had finally conceded, a bull market was under way again, lead this time by the bank shares. Marketability had improved markedly after the stock splits. In Graph 4:7, we can see the turnaround in the stock market all-share index in the spring of 1978, and it had taken a combination of

GRAPH 4:7
KUWAIT STOCK EXCHANGE ALL-SHARE INDEX 1973-79



government support and the stock splits to bring it about.

By mid-1979, with the passing of the Bahrain offshore ordinance for investment companies, a rash of new investment companies were formed in Bahrain by Kuwaiti entrepreneurs frustrated with the ministry of commerce restriction on the flotation of new companies. Although initially, these new flotations temporarily drained liquidity from the local market, the eventual effect was the reverse, as most of these new companies were re-investing on the Kuwait Stock Exchange. However the stock market all-share index dropped between the third quarter of 1979 and the second quarter of 1980, clearly in reaction to international interest rates. In May 1980 the government announced that it proposed to buy out the private shareholders in Kuwait Transport Company (the municipal bus company) and UASC, adding approximately KD 50 million of liquidity into the market. Although the market rose slightly after this, it continued to be under pressure throughout 1980 due to the growing political problems in the Gulf area. Additional negative factors at this time include U.S. interest rates turning up again, and the government announcing the flotation of the Petroleum Investment Company, which flotation withdrew KD 30 million of liquidity from the market.

b) The Nature of Dealing on the Stock Market and its impact on the Monetary Process

It is important to note when following this brief history of the stock market on Graph 4:7, that because the system of dealing only records a price change when a deal actually takes place, there being no continuous quotation systems as, for instance, in the New York and London Stock Exchanges, the movement of the all-share index probably understated the

true extent of every downturn over the period under study. The performance of prices in the stock market is highly volatile in periods of rising prices, whereas during a slump in the market very little activity takes place, which means that, since only prices actually transacted are recorded, the market seems to reach a "plateau" in bad times rather than fall drastically. Actual declines in the market are short-lived except for the decline in 1982/3 which occurs after the period under study.

In the Kuwait stock market no one usually buys shares for their dividend yield. Share prices are extremely high whether measured in terms of yield percentages, price-earnings ratios or net asset values. In 1980, for example, the major bank shares stood at price levels with dividend yields generally less than 1% and in some particular cases less than 0.5 per cent. Price/earnings ratios in the bank sector in 1980 ranged from 50 to over 100 and almost all the shares had prices standing at five and a half to six times net book value per share (based on 1980 results). Some of the newer industrial companies who had as yet made no profits and had no assets, other than shareholders' equity in the form of cash, could have stock prices standing at over twice the net asset value. Profits in such a market environment clearly came chiefly from capital gains and not dividend income. The trading nature of the Kuwaiti stock market had important repercussions on the nature of the monetary process. In Table 4:4 we can see a high level of quasi-money, proportionately to M2. This feature could have been used in section (ii) of this Chapter as an argument in defence of the argument favouring the advanced nature of the Kuwaiti banking system. But our findings in Chapter 3 regarding the correlation between the turnover in cheques cleared and the turnover in volume of shares traded in the stock market, led us to a different interpretation (66). It would seem that time

deposits were not funds invested with banks for long periods, but what we called "waiting-room" funds, awaiting use in the stock market, and against which the customer could borrow, should funds ever be needed at short notice. The very short maturities on time deposits which have worried the central bank throughout the period under study, are further confirmation of this point of view. A different approach supporting the argument that the Kuwaiti financial system as a whole is advanced, because perhaps of the bias in the money stock away from cash, because also of the high level of quasi-money, and not least because of obviously important securities markets, would not agree with the results of Crockett and Evans in their study of demand for money in the Middle-East [67]. Their findings show such a high elasticity of demand for money that the existence of fully-fledged securities markets as an alternative financial asset to money, would seem to be impossible. The only satisfactory conclusion to the dilemmas facing us here, therefore, is precisely that which comes out of our analysis in Chapter 3, namely that the growth in the stock of money must be complementary to the growth of the domestic stock market.

We have seen before, for instance in the use of post-dated cheques, that the small size of the investing community lent certain characteristics to commercial dealings. The system of dealing itself in the stock market is one of direct client-to-client dealing which is possible because of the small number of people involved. There is no obligation on a trader to employ a broker when dealing. It is relatively easy for a trader to find a buyer or a seller of a particular stock from among his own acquaintances, but even in the many cases where the client does employ a broker to find a counterparty, the final contract is still regarded as being a direct contract between the two clients of the broker. Either party has the right to refuse to consummate the deal

when he eventually learns of his counterparty's identity. As a result of this custom, the broker usually accepts no responsibility for the settlement of the transaction, unlike practice in all other stock exchanges in the world. Once the deal is agreed, the seller takes his share certificate and the broker's contract note to the company registrar from whom he obtains a receipt. He then presents this to the buyer against payment by cheque. The buyer then takes his copy of the contract with the receipt, to the company and receives a temporary note of title, pending issue of the formal share certificate. In active markets, many deals are completed on the basis of these temporary documents, as the buyer wishes to re-sell before registration is complete. In fact, we pointed out in Chapter 1 that since a great deal of trading did take place on the basis of temporary notes of title, accurate data on daily stock market transactions was almost impossible for the Ministry of Commerce to achieve.

In addition to these normal deals done for cash settlement, as we have seen earlier forward transactions became increasingly popular with time. Forward transactions have had a considerable impact on the performance of the stock market, on loan demand, and on the banking system in general as we have seen throughout Chapters 3 and 4. This form of dealing started during the 1976 boom in the stock market, in spite of the fact that, at that time, such deals were officially illegal and the resulting contracts therefore unenforceable in law. The basic procedure followed in this form of dealing was that two dealers agreed a price (normally a premium over the current market price) and a delivery date. The usual premium was about 25 per cent per annum, until 1979 when such premia rose to over 100 per cent. A premium of this nature is an implicit interest rate and as we saw earlier in this chapter the commercial banking system did participate in the stock market credit

system, which was based on post-dated cheques, as well as making personal loans to members of the large merchant families all of whom were involved as traders in the stock market. In Table 4:10, for instance, we saw that the faster growing areas of lending were financial and other services and personal loans especially between 1974-1976. It is difficult to estimate what proportion of those loans were discounted post-dated cheques, but whatever the proportion, it is obvious that the yields afforded by this activity far outstripped the published interest rates for advances and discounts listed in Table 4:16. The procedure for settlement of such a forward deal was that the seller should deliver the shares at once and receive in return a post-dated cheque. This procedure was customary because a valid action could actually be brought against the purchaser if his cheque was not honoured by his bank, whereas the underlying forward contract was unenforceable in law. In addition there was the problem that Kuwaiti banking law did not recognize the post-dating of cheques, and the seller could therefore effectively request payment at any time during the life of the forward contract. This basic asymmetry between the legal basis of the components of these transactions, led to the rather curious settlement procedure of delivering shares immediately on a forward contract. In turn this settlement procedure was at the bottom of the instability of the stock market and led to speculative excesses and unpleasant consequences. Early in 1977, after the problems of forward dealing became apparent, an attempt was made by the Ministry of Commerce to impose a regulated system of forward dealing where the buyer was required to pay over the premium element at once but the balance only on maturity. In addition it was thought that he could not expect delivery of shares until payment was complete. This system was close to the system of option dealing used on the London Stock Exchange but lacked the essential feature, to make such a purchase attractive, that the

buyer can withdraw at the cost of losing his premium. It was held by the lawyers of the Ministry of Commerce that such a feature would be in violation of the prohibition to engage in transactions of pure chance under Islamic law. The longest term that would be permitted for such contracts was for twelve months, and deals done under this official procedure were to be recorded and enforced at law. The procedure worked for a short period, but by 1979 the market found the old style of forward dealing more attractive.

c) The Offshore Companies

In addition to the stock market, a parallel or unofficial stock market was started for overseas companies domiciled in Gulf states other than Kuwait, twelve of which were formed between 1977 and 1980 and many more after the period under study. The capital of these companies was actually owned largely if not wholly by Kuwaitis; and the growth of these overseas (or offshore) companies became an extremely important feature of the stock market in its latter stages. The earlier overseas companies were established in the smaller member states of the United Arab Emirates. More recently however, since the passing of the Bahrain Offshore Ordinance for investment companies, they were formed in Bahrain. The first overseas company was the Sharjah Group and a good deal of controversy surrounded this share issue. When the licence was granted for the flotation of the Sharjah Group, it was assumed by the authorities that this would be on the normal basis that applied to Kuwaiti public companies. This meant that no trading could take place in the shares of the company until the first annual accounts had been published and, in particular, the founders should make no attempt to sell their own shares until three years had elapsed from the initial issue date (this being a provision of Kuwaiti law specifically designed

to prevent the launching of 'bubble' operations). As soon as it became evident that the Sharjah issue had been a success, the founders sold their shares at once, claiming that Kuwaiti law did not apply in the case of a foreign-registered operation. The Kuwaiti authorities reacted immediately by the outright banning secondary market trading in the shares, and this ban was automatically extended to all other offshore companies that followed. Like the ban on forward dealings, it was almost universally ignored, however. In 1979, an attempt was made by the authorities to make their ban more effective by ordering the closure of the registrar's offices in Kuwait so that no transfers of title could take place. Within a week registration was being arranged by telex at the various companies' head offices and the unofficial market was flourishing again.

The initial impetus for the rapid growth in the numbers of these offshore companies was the 1977 embargo on the flotation of any more Kuwaiti companies and the continuing strictures of the Ministry of Commerce in regard to public flotations. While this embargo lasted Kuwaiti entrepreneurs wishing to establish new companies had perforce to look offshore. The attraction of the offshore companies to Kuwait was the possibility of avoiding bureaucratic controls imposed by the Kuwaiti authorities on local companies. Under the law, any change to a company's articles, including an increase of capital, must be sanctioned by the authorities before becoming effective. In 1978, this power was used to force amendments to the terms of proposed rights issues even after they have been passed at shareholders's meetings. In addition, under Kuwaiti company law the objectives of a company must be narrowly drawn-up in its charter, and are, in case of arbitrations, narrowly interpreted by the courts. An offshore company is free by definition to disregard these restrictions.

In 1980, the government acted to try to resolve the anomalous situation created the existence of unrecognised companies by issuing guidelines for overseas companies which desired official recognition. The guidelines set by the Ministry of Commerce were, broadly speaking, that the company must be existence for three years, that it must have a capital of not less than KD 5 million, and that all the shares must be owned by citizens of Gulf states (and a half of the shares by Kuwaitis). In addition, the objectives of the company must have been clearly drawn up in the company's charter while management must be able to show that the company had consistently made a profit equal to not less than ten per cent of its capital, on activities which fell strictly within the activities so defined. The three-year rule alone immediately excluded all but half-a-dozen of the overseas companies from immediate consideration and the requirement of a profit history excluded most of them. The first two overseas companies, one based in Ajman and one in Sharjah, were admitted to official trading in March, 1981. Meanwhile unofficial trading in what became known as the "Manakh" market, after the site where offshore companies shares were traded, continued unabated. Although some banks tried to discriminate in their lending decisions between loans or discounted cheques related to the official stock exchange, and those related to the "Manakh" or unofficial stock market, on the basis that the latter was more speculative, overall bank loans and discounts related to all stock market transactions continued to grow throughout the period under study.

vi) BANK LENDING FOR STOCK PURCHASES - COMPARISONS WITH THE U.S. EXPERIENCE IN 1929

The most widely researched history of commercial banks involved with the stock market must be the period 1920-1934 in the U.S. This section

attempts to analyze in what way the situation in Kuwait resembled that particularly painful experience in the economic history of the U.S. Subsequent to the end of the period under study, the stock market in Kuwait suffered a collapse almost as painful as that experienced in the U.S., although what really interests us are the differences in the institutions and the environment in both countries in these two different periods and the consequent differences in the reasons for the occurrence of speculative excesses in the first place.

Friedman and Schwartz comment on the greatly increased level of investments of the commercial banks in the U.S. between 1922 and 1929, which represented, on average, 40 per cent of their loans over this period as opposed to only 29 per cent in 1920.

"The higher level of investments may have reflected partly the operations of security underwriting and distributing companies that were then affiliated with commercial banks In addition to combining the function of investment distribution with that of credit expansion, commercial banks intensified their exercise of fiduciary functions after the Federal Reserve Act and a wartime amendment recognised the right of national banks to engage in any kind of trust function." (68)

The main features of financial activity in this period, which culminated in a major stock market boom in 1928/9, according to Friedman and Schwartz, were the public flotation of foreign securities and a shift by domestic enterprises from borrowing by means of bank loans, to the public issue of bonds and stocks as a means of raising funds. This was

partially due to the reluctance of businesses to become indebted to banks, after their experience of loan liquidation in 1920-21.

Given the disastrous collapse of the stock market from 1929 to 1933, the investment evaluations of banks must be considered to have been unduly optimistic. However, Friedman and Schwartz take the view that the collapse could have been greatly moderated if the Federal Reserve had pursued different policies and, if such policies had been followed, investing banks might well have been justified in their assessment of the market prior to 1929. Friedman and Schwartz stress two major points in this respect. Firstly, the stock market crash itself deepened the underlying economic contraction that was taking place. Secondly, however, the crash itself was more directly a cause of the banking and liquidity crisis rather than a cause of the contraction. The liquidity crisis itself, they maintain, was ultimately due to inept monetary policy.

"Whatever its magnitude, the downward pressure on income produced by the effects of the stock market crash on expectations and willingness to spend - effects that can all be summarized in an independent decline in velocity - was strongly reinforced by the behaviour of the stock of money." (69)

The situation immediately after the crash in October 1929 was eased by the New York banks' willingness to take over loans from other national banks. The resultant increase in deposits in New York (due to the fact that New York banks took over claims on borrowers in return for the original lender accepting a deposit in the New York banks as repayment) meant that the New York banks had to acquire additional reserves. They

did so in the week of the crash partly by borrowing from the Federal Reserve. The Federal Reserve Bank of New York also make an unprecedented outright purchase of government securities of \$160m. for the system account and there were no panic increases in money market rates such as those in past market crises. Subsequently, however, a large number of bank failures occurred which precipitated all economic contraction. The failure of the Federal Reserve system to take the cue from private banking initiatives, led to the collapse of banks, which in turn, led to a decline in the demand for deposits, and therefore a sharp drop in the stock of money (but not as much as would have been the case, had prices of real assets not been declining so rapidly.)

"The great surge in bank failures that characterized the first banking crisis after October 1930 may possibly have resulted from poor loans and investment made in the Twenties.... However, the subsequent pay-out record during the liquidation of the Bank of the United States suggests that, if there was any permanent impairment of assets at the time the bank failed, it could not have been great.... Whatever may have been true of the initial bank failures in the first banking crisis, any exceptional deterioration in the quality of loans and investments in the later twenties or simply the acquisition of low-quality loans and investments in that period, was a minor factor in the subsequent bank failures" (70)

An initiative on the part of the Federal Reserve such as imposing restrictions on the convertibility of deposits into cash, could have

stemmed the tide of bank failures. But no such initiative was taken despite the proven success of restricting convertibility of deposits in previous cases.

"Banks had to dump their assets on the market, which inevitably forced a decline in the market value of those assets and hence of the remaining assets they held. The impairment in the market value of assets held by banks, particularly in their bond portfolios, was the most important source of impairment of capital leading to bank suspensions, rather than the default of specific loans or of specific bond issues" (71)

Therefore it was not the quality of the investments that led to bank collapses but the train of events in the wake of strains on liquidity.

"If deterioration of credit quality or bad banking was the trigger, which it may to some extent have been, the damaging bullet it discharged was the inability of the banking system to acquire additional high-powered money to meet the resulting demands of depositors for currency, without a multiple contraction of deposits..... The composition of assets held by the banks would hardly have mattered if additional high-powered money had been made available from whatever source to meet the demands of depositors for currency without requiring a multiple contraction of deposits and assets. The trigger would have discharged only a blank

cartridge. The banks would have been under no necessity to dump their assets" (72)

The story that Friedman and Schwartz tell, shows both the importance of the banking system in the investment boom of the late 1920's in the U.S. and in the ensuing collapse. The stock market crash which began due to an underlying contraction and which companies on the stock market, showing disappoint results, clearly helped to deepen the economic recession, but was worsened due to the bank failures. The blame for the three waves of bank failures (October 1930, March 1931 and January 1933) then lies squarely on the doorstep of the Federal Reserve. Why was monetary policy so inept?, is asked in the title of Section 7, Chapter 7, of "A Monetary History of the United States, 1867-1960." Since 1919 the question of security speculation had been a cause for concern within the Federal Reserve system. The differences that arose between the Federal Reserve Board and the Federal Reserve Bank of New York about the desirability of "qualitative" techniques of control designed to induce banks to discriminate against loans for speculative purposes, became well known. The view attributed to the Board in the period 1928-9 was that direct pressure was a feasible means of restricting the availability of credit for speculative purposes without unduly restricting its availability for productive purposes, whereas a rise in discount rates or open market sales sufficiently severe to curb speculation would be too severe for business in general. The Board's point of view that direct pressure was a feasible means of restricting credit for speculative purposes was expressed in a letter written by Governor Roy A. Young to the Reserve Banks on February 2, 1929, asserting that "a member bank is not within its reasonable claims for rediscount facilities at its Federal Reserve bank when it borrows either for the purpose of making speculative loans or for the purpose of

maintaining speculative loans". George L. Harrison, Governor of the Federal Reserve Bank of New York, argued on the contrary that generally credit was over-extended and that the discount rate must rise and "qualitative" controls could have no effect. Regretfully, the credit squeeze came too late, and when the crash came the Federal Reserve System did nothing to prevent bank failures, although all members of the Board clearly understood the problem raised by a panic attempt to convert deposits into currency. In the aftermath of the crash the Glass-Steagle Act of 1932/3 provided for a complete separation of commercial and investment banking activities in the U.S., so as to prevent a recurrence of the speculative flurry that preceded the stock market crash.

The dilemmas that faced the Federal Reserve system in these years were faced the Central Bank of Kuwait in the years under study, and we shall discuss the changing attitudes of the central bank to these dilemmas in detail in Chapter 5. If we compare the stock market boom in Kuwait and that of the U.S. in 1928-29 the Central Bank of Kuwait has shown considerable awareness by comparison with the Federal Reserve in 1929. The Federal Reserve had certainly seen a problem but could not agree how to solve it, while action was taken much too late which, we have seen, exacerbated the problem when it came. The Central Bank of Kuwait reorganised and tried to deal with the problem of speculation. However, somewhat in the same position as the Ministry of Commerce in its legislative attempts to curb stock market speculation, the Central Bank's attempts at reform, the avoidance of a crisis (which eventually came after the period under study in March 1982), were foiled by the nature of society in Kuwait and the fact that circumvention of the laws - and in particular of the new legislation - was ignored by the ruler and the cabinet of Ministers. If certain problems have emerged, therefore,

it has been due to a circumvention of law and an inability of the monetary authorities to enforce regulation. It would seem that modern institutions such as the Central Bank of Kuwait and the Ministry of Commerce sat uneasily on top of a complex tribal society.

As we have seen in Section 3 above but as we shall see in more detail in Chapter 5, the Central Bank of Kuwait, like Governor Harrison before, has, since 1978, become sceptical of "qualitative" controls applied to commercial banks to reduce loans made for speculative purposes. Investments by the banks themselves have been prohibited outright, while a sectoral classification of credit was begun to control the direction of loans with the idea of using moral suasion to reduce security lending. This system not having worked as well as it was hoped, stiffer liquidity ratios were applied and "aggregative" credit control was thought to be more effective in controlling stock market speculation rather "qualitative" measures. However, the liquidity crises created by external developments in the U.S. between 1978-80 meant that in this period, the Central Bank had to inject funds into the commercial banking system. Clearly, the monetary authorities' restrictive stance, and its concern over stock market speculation did not preclude the adding of high powered money to prevent bank failures when the situation warranted. This was clearly an exemplary stance, if compared with that of the Federal Reserve System between 1928-32. We can see this flexibility and pragmatism in central policy in Chapter 5 which clearly shows us the irony of rediscount and swap facilities arranged at one time to drain liquidity from the financial system, but subsequently used to add liquidity to it, as circumstances changed.

The more uncontrollable aspects of stock market speculation in Kuwait relate to the "Gulf" or "offshore" stocks which were described in the

last section of this chapter. We have already seen that the Ministry of Commerce tried to make it difficult for the public to be able to trade in shares which did not have a track-record, but in vain. The official stocks (the 42 listed stocks on the Kuwaiti Stock Exchange) were affected after 1979 in parallel fashion with the "Manakh" market, because they were the target of speculation by the offshore companies themselves. Offshore companies had been set-up in the Emirates and then in Bahrain precisely because they could ignore the restriction of Kuwaiti Law on company registration. The Ministry of Commerce in 1977 tried an embargo on the flotation of such companies, then in 1979 it issued guidelines for offshore companies that sought official recognition. Trading in the offshore company shares were uncontrollable chiefly because of the lack of political will at the level of the ruler and the cabinet of ministers in respect of the enforceability of these laws and regulations.

Bank credit was not the main cause of speculative fever in Kuwait in the period under study as it had been in the U.S. in the late 1920's. But although the banking system did seek to join the stock market credit system, contrary to the wishes of the Central Bank and spurred on (in particular in 1980/1) by the extraordinary profitability of such loans, much of the credit that actually pushed the market to its extraordinary highs was generated internally by the system of dealing which we described in the last section. The present delivery of a share against a post-dated cheque gave the stock market credit system an unusual potential for leverage. A forward purchase by an investor, would immediately create enough collateral for a further purchase, whether spot or forward, by virtue of the present delivery of the stock. It is not surprising therefore that the system was unusually adept at generating bull markets. The most interesting exploitation of these

possibilities was seen in the operation of the large brokerage operations. A broker, in one of the simpler examples of brokerage dealings, would sell a stock and buy it back on the forward market, thereby generating cash (between the receipt of monies on the spot sale and the payment of the post-dated cheque for the forward purchase) which could be lent out at usurious rates to investors in the stock market. Furthermore, the present delivery rule (which we have shown earlier is the basis of the leverage system) could allow the broker to do such a transaction a number of times in sequence, thereby generating even more cash which he could on-lend to investors in the stock market. Broker credit, therefore, as well as credit tendered between major traders in the market, in the form of post-dated cheques, constituted the credit internally generated by the stock market, or what we have called the stock market credit system.

The question of credit extended directly between the major traders in the market is an extremely important factor which has bearing on both the nature of the stock market boom and the implications of a potential collapse. As we saw in the previous section the number of players in the Kuwait Stock market is small, while the dealing system implies clearly that these players are personally known to each other and that it is extremely difficult for a new entrant to make a significant impact on share dealings. The small group of players in the marketplace who themselves have generated a substantial amount of credit, who organise share swaps, and who are supported by credit from the brokers and ultimately from the banks, can, as we have seen, continue to push stock prices up for long periods of time. It has often been said in Kuwait that government support of the market is the main cause behind the bullish psychology. This, however, has to be qualified. Firstly, in the case of the monetary authorities and the stock market regulative

body there is only evidence of caution and of sensible attempts by both to prevent stock market "bubbles" from being created, despite the fact that the government machine as a whole did not actively try to promote the enforceability of the regulations issued by these particular agencies. Secondly, while the merchants could in some instances gather the support of the ruler at times when the stock market would go through a depressed phase, and while it has been government policy as we saw in the last section of Chapter 1 to promote the development of the stock market, the effects of these factors must be considered as secondary to the rigging of the market by the market participants in particular the large ones. With the benefit of hindsight, the crash of March 1982 did not particularly affect the banking system in any serious fashion, whereas, quite in contrast to the U.S. experience, the problem of individual bankruptcies posed itself as the central problem.

FOOTNOTES TO CHAPTER 4

- 1) M.W. Khouja and P.G. Sadler, The Economy of Kuwait - Development and Role in International Finance, (London : Macmillan, 1979), pp. 164, and Central Bank of Kuwait, Economic Report for 1979, pp.60.
- 2) See Chapter 3, pp. 163-165.
- 3) P.J. Drake, "Securities Markets in Less-Developed Countries", in Finance in Developing Countries, ed. P.C.I. Ayre (London: Frank Cass and Co., 1977), pp 81-83.
- 4) See Chapter 3 pp. 163-165.
- 5) Ibid, pp. 161-166.
- 6) Ibid, pp. 131.
- 7) Ibid, pp 164-165
- 8) Ibid, pp. 100-103.
- 9) Ibid, pp. 131.
- 10) Ibid, pp. 111-113.
- 11) Ibid, pp. 115-116.

- 12) Ibid, pp. 165.
- 13) See Chapter 1, pp. 32 and Table 1:4.
- 14) See this chapter, pp. 252-253.
- 15) See Chapter 1, pp. 11.
- 16) See Chapter 3, pp. 145-147.
- 17) Central Bank of Kuwait, Economic Report for 1979, pp.60.
- 18) See this chapter, pp. 147.
- 19) See Chapter 3, pp. 149.
- 20) Central Bank of Kuwait, Economic Report for 1979, pp.64.
- 21) See Chapter 3, pp. 147.
- 22) See this chapter, section (v), pp. 256.
- 23) See Chapter 1, and footnote 13 to Chapter 1. The close relationship between Bahrain and Kuwait dates back to the immigration of the Khalifas from Kuwait to Bahrain.
- 24) See Chapter 3, pp. 124-131, see also this chapter, pp. 232-249.
- 25) Alan Moore, "Onshore and Offshore Banking in Bahrain", in Arab Financial Markets, eds. Peter Field and Alan Moore, (London :

Euromoney Publications, 1981), pp.94.

- 26) See this chapter, pp. 235-236.
- 27) Ibid, pp. 212.
- 28) See Chapter 5, pp. 310-313.
- 29) Ibid, pp. 298 and 301.
- 30) See this Chapter, section (iv), pp. 222.
- 31) Ibid, section (v), pp. 256.
- 32) See Chapter 3, pp. 145-147.
- 33) Ibid.
- 34) Ibid, pp. 136-161.
- 35) R.A. Wilson, "The Determinants of Commercial Bank Deposits and Lending in the Gulf", The Arab Gulf Journal, Vol. 2, No. 2, October 1982, pp. 77-92.
- 36) F.Y. Edgeworth, "The Mathematical Theory of Banking", Journal of the Royal Statistical Society, March 1888, pp.113-127.
- 37) R.C. Porter, "A Model of Bank Portfolio Selection" Yale Economic Essays, Fall 1961, pp.323-59.

- 38) D. Orr and W.G. Mellon, "Stochastic Reserves, Losses and Expansion of Bank Credit", American Economic Review, September 1961, pp.614-23.
- 39) G.R. Morrison, Liquidity Preferences of Commercial Banks, (Chicago : University of Chicago Press, 1966).
- 40) A Charnes and S. Thore, "Planning for Liquidity in Financial Institutions : the Chance-Constrained Method", Journal of Finance, December 1966, pp.649-74.
- 41) W. Poole, "Commercial Bank Reserve Management in a Stochastic Model : Implications for Monetary Policy", Journal of Finance, December 1968, pp.769-91.
- 42) K. Brunner, "A Scheme for the Supply Theory of Money", International Economic Review, January 1961, pp.79-109.
- 43) H.M. Markowitz, Portfolio Selection : Efficient Diversification of Investments, Cowles Foundation Monograph No. 16, (New York : Wiley 1959).
- 44) J. Tobin, "Liquidity Preference as Behaviour towards Risk", Review of Economic Studies, February 1958, pp.65-86.
- 45) See Graph 4:4, pp. 225.
- 46) See Table 3:2, pp. 121.
- 47) See Table 4:7, pp. 204, and Graph 4:6, pp. 227, for an overall

analysis of movements in the banks portfolios and funding base.

- 48) See in particular Central Bank of Kuwait, Economic Report for 1975, pp.58.
- 49) See Chapter 3, pp. 142.
- 50) See Chapter 5, pp. 309.
- 51) Central Bank of Kuwait, Economic Report for 1978, pp.59.
- 52) See Chapter 3, pp. 142 and 143.
- 53) See this chapter, pp. 250, quotation from the Central Bank of Kuwait, Economic Report for 1972.
- 54) See this chapter, pp. 246, quotation from the Central Bank of Kuwait, Economic Report for 1980.
- 55) See Chapter 3, pp. 125.
- 56) Central Bank of Kuwait, Economic Report for 1975, pp.58.
- 57) See this chapter, pp. 212-213.
- 58) Central Bank of Kuwait, Economic Report for 1978, pp.65.
- 59) See this chapter, pp. 212-213.
- 60) Central Bank of Kuwait, Economic Report for 1980, pp.63.

- 61) Central Bank of Kuwait, Economic Report for 1975, pp.58.
- 62) Central Bank of Kuwait, Economic Report for 1972, pp. 93.
- 63) See Chapter 5, pp. 298-303.
- 64) Central Bank of Kuwait, Economic Report for 1981,pp.62.
- 65) See Chapter 1, pp. 28.
- 66) See Chapter 3, pp. 145-148.
- 67) Crockett A.D., and Evans O.J., "Demand for Money in the Middle Eastern Countries", I.M.F. Staff Papers, December 1980, pp. 543-577.
- 68) Milton Friedman and Anna Jacobson Schwartz, A Monetary History of the United States, 1867-1960, National Bureau of Economic Research, (Princeton : Princeton University Press, 1963), pp. 245.
- 69) Op. cit., pp. 307.
- 70) Op. cit., pp. 355.
- 71) Op. cit., pp. 355.
- 72) Op. cit., pp. 356.

CHAPTER 5

THE EVOLUTION OF CENTRAL BANK POLICY IN THE CREDIT MARKETS

i) THE OBJECTIVES OF CENTRAL BANK POLICY

The importance of money in the growth process based on the notion that real money balances act as a "conduit" for physical capital investment and are therefore complementary to it, which we discussed in Chapter 3, is a point which may be of some relevance to the context of the Kuwaiti economy (1). However, analysts of the Kuwait economy have always been:-

"... confronted with a different set of problems from those encountered in countries with a limited financial but more diversified physical and human resources" (2)

Put simply, Kuwait is a capital-plenty economy quite untypical of developing economies. However, and more importantly, we have seen evidence of low loan demand and limited investment opportunities of the surplus of the banking system for the period 1960-76 which has been fundamental to our arguments so far. In sharp contrast, unsatisfied loan demand is an implicit assumption of McKinnon and Shaw models of "financial repression" which describe the policy dilemmas of generally over-populated and capital-scarce economies which are attempting to grow. We have shown that in Kuwait growth in loan demand has been one of the main causes of growth in the money supply in the period under study, during which period bank lending increased considerably. Consequently it would appear that problems of "financial repression" as

defined in Chapter 3 and the related policy considerations do not apply in the structuring of objectives of policy in Kuwait (3). But the empirical results tending to show the high income elasticity of demand for money, and showing in particular, despite all the attendant qualifications, a constant to declining velocity of money, lead us to the general conclusion that there is not much fundamentally different between the situation in Kuwait and that in many other developing countries. But the reasons for this superficial similarity, which make the "financial repression" and "conduit" approaches apparently useful is based, as we saw in Chapter 3, on the "trading" nature of the stock market and the transactional nature of quasi-money in Kuwait. Whereas the McKinnon equilibrium condition for interest rates may seem to be appropriate here, first of all the low interest rates in Kuwait have led to fast credit expansion and secondly, as we saw in the last section of Chapter 3, the relationship between domestic and foreign interest rates are very important in the case of a capital-plenty economy.

Kuwait is a small open economy which is clearly a candidate for a Polak-type model, and where the basic logic of Polak models that we set out in Chapter 3 applies. Consequently, we shall try to assess what the implications of this are for the defining of Kuwait's policy objectives in the context of our discussions regarding currency-board economies, which were considered in Chapter 3 as practical examples where the Polak framework would apply, but where the degree of application would vary depending on the structure and the policies of the currency-board in question (4). We found that both the model and discussions by Wong (5), Betz (6) and Drake (7) of currency-board economies, all agreed that the money stock tended to be an endogenous variable, in that it depended partly of the balance of trade or the balance of payments. There was, nevertheless, enough of a lag between the time when domestic credit

expansion would lead to an increase in domestic incomes and the time when it would be washed out in declining foreign exchange reserves for contra-cyclical monetary policy to be used to pursue a policy of offsetting short-term influences from the foreign trade and payments sector on the level of domestic incomes. The objective of contra-cyclical monetary policy is clearly indicated by the logic of the Polak model as the prime function of domestic monetary authorities since as we have seen in the policy allocation or assignment models a fixed exchange rate (which is a basic assumption of the Polak model) would imply assigning monetary policy to managing the external balance (8).

As we shall see below, however, the fact that the central bank has not been fully in control of the monetary base or "high-powered money" of the system has been a major drawback in its ability to carry out any kind of contra-cyclical monetary policy. However, prior even to analysing this aspect of the central bank's asset and liability structure in relation to the asset and liability structure of the commercial banks, there are more fundamental points to tackle which involves the institutional framework which surrounds the relationship between the money stock and the balance of payments in Kuwait which may have fundamental implications for the objectives of policy. In brief contra-cyclical policy in respect of the trade or payments balances may not be strictly necessary. The sale of petroleum which is Kuwait's main foreign exchange earner has no direct impact on money supply since the Ministry of Finance holds the large majority of the country's foreign exchange reserves and the so-called "balance of payments effect" when foreign exchange earnings increase (or in a currency-board context - decrease) the money supply, takes place not directly but usually when the Ministry of Finance undertakes local expenditure:-

"It is to be noted that the Ministry of Finance is the authority which administers the larger portion of state reserves originating from revenues, while the central bank executes all local and foreign banking transactions for government ministries and agencies" (9)

Since the Ministry of Finance controls all government expenditure in the economy and insulates it from developments in the country's chief export sector, it therefore determines what we have called the "balance of payments" effect by virtue of public expenditure policies. The central bank seems to have no role in carrying out typical contra-cyclical monetary policy required in a small open economy to offset the effect of external influences on the money supply and incomes.

The role that the central bank has seen for itself since its inception in 1969 which has been repeated in its annual reports every year since then, is to temper the inflationary impact of a high level of government expenditure and the speculative consequence of such expenditure in the context of the private sector.

"... monetary policy adopted by the Bank through recent years, particularly in 1977, has to some extent alleviated inflationary pressures on the local economy and has contributed towards limiting speculation by organizing and rationalizing the credit policy of the commercial banks, and curbing the sharp expansionary trend of domestic liquidity ... However it is likely that the large amounts of liquid cash injected into the domestic economy as of

December 1977 - through Government purchases of shares of national companies - would make domestic liquidity grow at rates surpassing by far the rates of real economic growth in the country. Hence emphasis should again be made as regards the necessity for co-ordination of efforts between the monetary authorities (the Central Bank) and the fiscal authorities (the Ministry of Finance) to regulate the flow of domestic liquidity from its two major sources (Government expenditure and credit expansion) according to such economic priorities and criteria as would not result in detrimental repercussions on the national economy as a whole whether in the short or long-term." (10)

This is the fullest statement of the central bank's objectives and attitudes yet made which recognises the limitations imposed on it by the dominant nature of public expenditure of the government in relation to its own ability to drain liquidity from the system and which significantly recognises the limited absorptive capacity of the domestic economy where both public expenditure and credit creation seem to be in their view over-expansionary:-

"One of the major concerns of the central bank at present is the sharp expansion in domestic liquidity at rates outpacing the expansion of productive economic activities" (11)

The appeal by the central bank above for increased coordination between monetary and fiscal policy would seem to be only half the problem since

the commercial banking system itself, being highly liquid, has been capable of considerable domestic credit creation (12). To some extent the effects of domestic credit creation are washed out through the foreign exchange demand multiplier (ie. the demand for imports and capital outflows), but as we have seen the foreign exchange demand multiplier in Kuwait is not as high as is usually assumed due to the high returns and opportunities made available to the private sector domestically as a result of continued high public expenditure (13). As we shall see below the main problem in controlling potentially explosive domestic credit creation is in the incompatibility of the asset and liabilities structures of the central bank and the commercial banks. We saw in Chapter 3 that to a large extent, the expansions of bank lending in the period under study was based not on domestic but foreign reserves. In summary:-

"... levels of liquidity are, to a large extent, related to outside factors beyond the control of the monetary authorities" (14)

whether we are talking about public expenditure or bank lending. We have seen in the last section of Chapter 4 that much of the expansion of the stock market was due to an informal credit system, and although the commercial banks did participate in what we called the stock market credit system, they were not directly the cause of the credit explosion and the related stock market boom. The central bank as we shall see below has been specifically concerned about the speculative aspects of the Kuwaiti stock market and the possible involvement of the banks and began to take a series of steps to preclude dangerous developments as far back as 1973 when its officials made the following remark:-

"The central bank has ... been lately in close contact with a view to alleviating the rapidly growing speculation" (15)

The central bank recognized therefore that much of the credit pyramid that grew since then has been based on the rapidly growing stock market and sees itself in a "supportive role" in attempting to prevent confidence-shaking defaults resulting from a stock market debacle. A.B. Cramp in his book on monetary management stated that:-

"The central bank has twin duties of supporting financial markets and of controlling these markets in the interests of macro-economic policy. These duties can in certain circumstances conflict, and in the absence of some reconciling expedient the central bank must give priority to its supporting role" (16)

Cramp discusses the fact that what might inhibit a central bank from severely squeezing a cash-base is generally possible adverse effects of a strong and fast upward interest rate spiral on institutions where rate structure is "sticky". The only possible reconciling expedient would be in the form of direct controls in such a case. The situation that we have described which exists in Kuwait leads the central bank to put emphasis on its supportive role, due, rather by default, to its inability to properly implement a squeeze on the monetary base, and not necessarily due to an objective appraisal of policy consequences. Since the early days the central bank has tried to impose direct controls, as we have seen, in the form of a sectoral lending monitoring function, centralized information on borrowers and lending limits on

individuals. These direct controls have been, along with other more specific directives, the subject of frequent meetings between the central bank and the management of the commercial banks. But it is clear from our analysis that this has not prevented the central bank from pursuing a policy of developing tools that would help to increase its ability, in the long-term, of implementing a controlling function.

In summary, the central bank has pursued a pragmatic path in defining its objectives. It has determined such objectives largely according to the limitations it faces but also according to what it considered that it should be right to do in the context of what it has frequently referred to as "dangerous developments" in the stock market credit system and the real estate sector. Such "dangerous developments" was a clear reference to the dangers the commercial banks faced in the aftermath of the collapse of a speculative bubble. The impact of its policies have naturally been weak over the years taken as a whole due to the need to develop instruments of control to implement its policies, and as we have seen in both Chapters 3 and 4, by the time legislation in respect of bank credit control had been passed and perfected in 1978/9, the banking system was no longer liquid and actually the commercial banks began to seek to borrow funds from the central bank (as well as from other sources). 1978 represented the beginning of a period of high international interest rates which put a strain on the domestic banking system in Kuwait, due to the rigid domestic interest rate structure. The extent to which the tardiness of reform of the domestic interest rate structure was an intentional ploy on behalf of the central bank to increase their control over the commercial banks, will be discussed below.

The traditional theoretical parameters for small open economies and currency-board economies do not therefore apply in Kuwait due to the capital-plenty nature of the economy. In particular the influence of the balance of payments on the money supply is controlled by the Ministry of Finance. The problem has been that the size of government expenditure (as well as the lack of instruments to control money supply) has meant that it has been very difficult for the central bank to pursue any kind of contra-cyclical monetary policy. Meanwhile the high liquidity generated by government expenditure in a low absorption economy has meant that the central bank has had to divert its attention mainly to limited domestic credit expansion.

ii) INSTRUMENTS OF CONTROL

In the first period of the central bank's existence (1969-78) we see an emphasis on meetings with the commercial banks and moral suasion as a tool of policy. The mandatory liquidity ratio of 23 April 1974 was much lower than existing ratios and had little impact, while interest bearing deposits at the central bank attracted little interest and the rediscount window was little used until 1978. Selective controls are an appropriate strategy if the direction of loans is a problem which we seem to have shown in our analysis in Chapter 4 on the sectoral distribution of credit. In the context of the central bank's struggle for independent monetary management, selective controls which imply moral suasion and tended to be implemented through direct instructions, in fact represent the only instrument that in principle they may have had to mitigate the speculative excesses of the stock market. However, the success of selective credit controls can only be partial in an economy like that of Kuwait where most businesses are run by individuals

TABLE 5.1

BALANCE SHEET OF CENTRAL BANK OF KUWAIT 1972-80
(Millions of Kuwaiti Dinars)

End of Period	Foreign Assets	Commercial Paper Discounted	Other Assets	Total Assets and Liabilities	Reserve Money			Government Accounts	Capital and Reserves	Other Liabilities
					Currency Issue	Local Bank Balances	Central Bank Bills			
1972	121.6	-	0.5	122.1	61.6	9.4	-	36.6	5.0	9.5
1973	148.2	-	3.7	151.9	75.8	20.0	-	28.4	5.0	22.7
1974	393.7	-	4.3	398.0	86.9	42.2	-	213.1	5.0	50.8
1975	486.6	4.5	8.8	499.9	107.8	61.4	-	271.5	5.0	54.2
1976	548.6	2.1	3.6	554.2	137.0	87.8	-	270.8	5.0	53.6
1977	817.0	20.7	6.1	843.8	161.3	270.2	-	325.1	8.0	79.2
1978	700.7	30.6	6.8	738.1	188.3	130.4	-	274.8	27.9	116.7
1979	812.8	195.3	6.2	1014.1	229.5	136.2	13.5	446.1	27.9	161.1
1980	1080.8	298.6	44.7	1424.1	268.7	129.5	108.0	668.7	30.0	219.2

TABLE 5.2**LIST OF MAJOR POLICY CHANGES BY THE CENTRAL BANK OF KUWAIT 1972-80**

1973	Establishment of interest-bearing deposits at the central bank.
1974	First mandatory liquidity ratio.
1975	Discount window for commercial bills up to three months opened.
1976	First reform of interest rates and raising of the interest ceiling.
1978	<ul style="list-style-type: none"> a) Discount window facilities extended to twelve months. b) Graded mandatory liquidity ratio introduced and average liquidity ratio raised. c) First proposal of currency swaps.
1979	<ul style="list-style-type: none"> a) Currency swap arrangements introduced for the commercial banks. b) Introduction of Central Bank Bills
1980	<ul style="list-style-type: none"> a) First mandatory reserve ratio b) First mandatory Central Bank Bill ratio

or as 'general trading companies'. Monitoring the use of funds in this context is very difficult and some would argue impossible. In the second period of the central bank's existence through to the end of the period under study (1978-80) some of the long-term policies of the central bank began to bear fruit while at the same time circumstances conspired to reduce bank liquidity and therefore to reduce their independence. During this period as we shall see below, the central bank tightened control over bank liquidity, increased the proportion of liquidity that need be kept domestically, and tightened control also on overdrafts while trying to lengthen the average maturity of bank deposits. The central bank developed other independent and more sophisticated methods of control. It makes clear its:-

"... desire to diversify and develop the local money markets to enable it to regulate the liquidity in the domestic economy" (17)

In April 1979 in its final attempt to impose a non-voluntary method of injecting and draining bank reserves the central bank began issuing Central Bank of Kuwait bills (CBK bills) to replace the interest-bearing deposit system which had been used by the central bank to attract surplus funds away from the commercial banks but which clearly were not as flexible as the proposed system of CBK bills. These bills began to be issued in 91-day and 28-day maturities:-

"...such bills would provide the central bank with one of the significant monetary policy tools whereby it could both regulate local banks' liquidity and also contribute to the development of the monetary and financial market and expand and diversify its

base. At present this tool is the nucleus of operations administered widely in highly advanced monetary and financial markets, namely 'open-market operations'" (18)

The development of money and capital markets that would allow the growth of domestic reserve assets and the institution of open market operations would seem to depend however on the reform of the interest rate system. Deena Khakhate has reviewed the development of open market operations in the context of Taiwan (19). She remarks that many LDC's in the 1970's have promoted the concept of government bonds, both as a means of promoting savings and of developing an asset base on which to perform open market operations. While frequent use of rediscount facilities has been made in these countries, thereby allowing the discount rate to become an effective policy tool, the resort to open market operations has been conspicuous by its almost total absence. Taiwan's experience crystallizes the general problem that the policies pursued by LDC governments in their creation of a government bond market have eliminated the conditions that would have been necessary for open market operations to succeed. In particular, interference with the price mechanism in the bond markets has made open market policy ineffective. The authorities in Taiwan assumed that a non-variable but high interest rate was necessary for the public's acceptance of government obligations. Through the Bank of Taiwan's intervention, the liquidity of government bonds was assured, so that in effect what the public held was "money" with a lucrative interest rate. The authorities thereby denied themselves the chance to vary the interest rate structure, while the gimmick of maintaining unchanged government bond prices also proved unrewarding. Flexible and free play of interest rates and bond yields are essential for these operations and also for the development of these

markets. Khakhate also points out that the banks did not buy these bonds of their own free will and that the inability of the bond to reflect market demand and supply limited the banks' participation. We see likewise in Kuwait that the issue by the central bank of CBK bills (which were issued in place of treasury bills since the central government is not a net borrower) had to be managed within the official interest rate structure which unfortunately did not give a high enough yield to induce banks and other institutions to buy them voluntarily. This problem has existed since the institution of interest bearing deposits in 1973 which CBK bills were supposed to replace. The amount of CBK bills held by banks did increase from the date of their inception, but they only increased substantially after the establishment of a mandatory reserve ratio (in addition to the existing liquidity ratio) in June 1980 which included as reserve assets CBK bills along with cash and balances at the central bank. A special provision required that 10 per cent of liquid assets be held in CBK bills. The fact that the increase in KD liquid assets held by the commercial banks over the years was largely due to legislation was commented on in Chapter 4 (20), and in the case of CBK bills the situation is no different:-

"CBK bills were introduced in April 1979, and their issue remained limited until the amended liquidity system was put into force in mid-June 1980" (21)

Usury Laws remained unchanged until Article 166 of Kuwaiti Commercial Law was amended under the Amiri Decree No. 102 in November 1976 when the 7 per cent per annum interest ceiling was abandoned for a graded structure where the limit on secured loans of one year maturity or less was kept at 7 per cent per annum but unsecured loans with a similar

maturity structure had a limit of 8.5 per cent per annum and unsecured loans over one year long had a limit of 10 per cent per annum. Until that time we showed in Chapter 4 that the commercial banks managed interest rates through an inter-bank agreement and regular meetings but always within the context of the interest rate ceiling set by law (22). The amendment in 1976 further stated that the responsibility for managing interest rates within the guidelines set by the law lay with the central bank, which began effectively to act in this direction on 6 February, 1977:-

"... the resolution set the minimum rate of interest on local savings in KD at 4 1/2 per cent" (23)

But the overall rigidity in local interest rates coupled with a stable exchange rate against the US dollar often lead to arbitrage flows. These flows as we have seen tended to increase the demand for loans (24) and also led to an increase in the foreign exchange demand multiplier in the period 1978-80 (25). Since the merchant community borrows Kuwaiti Dinars to re-lend at higher interest rates abroad, as we saw in the last section of Chapter 3, runs down KD deposits and switches to foreign currency deposits (26), the banking system is forced to run down foreign assets and their reserve ratios at unacceptable rates which led to increases in borrowing from abroad and from the central bank. If the central bank stopped supplying liquidity to replenish the banks' reserves, a liquidity crisis would occur. Reform of the interest rate structure would provide a regulatory mechanism that would prevent these shocks from affecting the system. We have seen in Chapter 4 that it was the intention of the central bank consciously to keep domestic interest rates low and supply the liquidity needed by the banks to replenish their reserves through the discount window and swaps (27).

However a change of direction was evident at the central bank over the years in its approach towards interest rates and their reform:-

"The recent amendment abrogating the former ceiling on the local rate of interest and empowering the central bank to control interest rates is in itself a significant step on the path of the development of the domestic money and capital market" (28)

How different this optimistic statement was to a statement made four years later in 1981:-

"... maintenance of the local interest rate structure especially as regards the KD lending rates governed by the legal ceiling, despite strains resulting from the sharp upward trend in international interest rates. It was neither possible nor advisable for the local interest rates to compete with this trend, because the justifications for raising interest rates in the U.S.A. or elsewhere do not necessarily apply to the local interest rates in Kuwait" (29)

It could have been that the central bank was limited by the interest rate law in its ability to raise interest rates in response to rises in international interest rates. However, what is particularly interesting is that whereas the introduction of swaps agreements as an instrument of policy to drain liquidity did not have the occasion to function, international yield differentials had as we have seen a considerably draining impact on the banks. Despite what the above quotation implied,

previously the central bank had often stated that a credit control policy had been imposed in order to halt runaway speculation, and to increase interest rates in Kuwait would have done little but to protect the liquidity of the banking system and encourage depositors to keep their funds in Kuwait and in Kuwaiti Dinars. The increased borrowing of the commercial banks from the central bank in this period reduced their traditional independence from the monetary authorities considerably. In particular this became especially true after the legislation of June 1980 which required the commercial banks to hold a certain proportion of their liquid assets in the form of CBK bills. The period of strained liquidity in the banking system between 1978 and 1980, provided an excellent opportunity for the central bank to introduce CBK bills as a compulsory liquid asset in compensation for the large borrowings that the commercial banks had been building up from the central bank. Even if this had not been necessarily a premeditated plan on the part of the central bank, it showed laudable pragmatism in exploiting such a situation. This is an important and as yet unnoticed observation in the Central Bank's credit policy development.

In the 1981 Economic Report the central bank was quite wrong when it stated that it had two possible policy alternatives before it in periods of strained liquidity due to external factors. It had stated that it could either respond by raising interest rates thereby alleviating pressure from capital outflows, or by keeping interest rates low while supplying liquidity to the banks through discount facilities and the swap window. It did choose to follow the second policy alternative but in view of the overall circumstances that the central bank was operating in it is difficult to view it as a clear alternative rather than the only possible one (30). The second best environment that the central bank operated in and the need for continuous attempts at reform of the financial system has meant that there is a need for unusual policy

decisions to be taken. If our theories that the major drawback in central bank effectiveness and its ability to control bank reserves has been due to the perennial liquidity of the banking system, then the above policies which were followed in the period 1978-81 were appropriate in that they finally reduced the liquidity of the commercial banks and thereby their independence.

The determination of the central bank to create complementarity in the asset structures of its own balance sheet and those of the commercial banks is clear. Such assets would have to have the quality that they could be easily transferable from one to the other. Such an asset need not have been in the form of CBK bills:-

"The central bank is considering the possibilities to participate in the secondary market of KD denominated bonds, since such bonds are considered a basic tool in the local capital market" (31)

We have seen however that the banking system itself both bids for foreign currency deposits and also increases the attractiveness of KD deposits at such times as foreign interest rates rise, not just by increasing returns paid to depositors, but also by giving non-monetary or side benefits to customers for instance by granting compensatory loans to customers or allowing them to break the deposit in the middle of a fixed period without penalty, or simply by paying commissions which would be visibly unrelated. The central bank, however, has been working in the opposite direction to the tendency for the banks to give clients maximum liquidity and the ability to break their deposit periods in order to restructure their liability structure which is on average too short in maturity. In particular the liquidity ratio of 25 per cent

imposed from August 1974 after the new law announced on 23 April 1974, was changed to a graded system where the liquidity ratio depended on the term of the liability. Time deposits with maturities over one year would not be subject to the ratio, while 35 per cent liquidity had, at the other end of the spectrum, to be kept against current accounts. The overall minimum ratio was $33 \frac{1}{3}$ per cent while the KD portion, as we have seen, was increased from 7.5 per cent to $33 \frac{1}{3}$ per cent. It is clear that the imbalance created by the domestic interest rate structure led to the banks giving both unofficial payments to depositors as well as flexibility on the nature of the deposit, and increasingly so as liquidity became strained in the period 1978-80. We saw in Chapter 3 that time deposits could hardly be considered quasi-money due to their short maturities and the fact that they were dependent on overdraft facilities being granted to the customer (32). If the central bank was not successful in changing interest rate policies it did attempt, with varying degrees of success, to impose a better structure on the liabilities of the banks, such that the average deposit had a longer maturity.

Reform over the years has been aimed also at improving the central bank's control over the reserve assets of the banking system. The discount window for commercial bills of maturities not exceeding three months, opened in 1975, failed as we have seen due to the fact that not many 3-month bills were available in the system and that the banks were liquid for most of the period under study. By 1978 though the liquidity crisis increased the number of discounts and the increase of the limit to 12-month paper improved the facility's usefulness. The central bank could not interest the commercial banks either in this nor in the interest-bearing deposits (established in 1973) which bore an interest rate of $1/2\%$ above the savings deposit rate but which as we have seen

were eventually replaced by CBK bills. We can see this from Table 4:17 which shows the insignificant balances held at the central bank even after 1979. The convertibility of the Kuwaiti Dinar into the U.S. Dollar at a relatively stable exchange meant that higher yielding foreign liquid assets would be more likely to attract the commercial banks' attention. The same yield problems have dogged the various attempts by the central bank to issue CBK bills. Low discount rates has seen the commercial banks on the average as borrowers from rather than lenders to the central bank, to the extent that borrowing limits applicable to each bank would permit. This as we have seen might have exacerbated the central bank's inability to control credit creation in the past, but in the longer term this factor contributed importantly to the loss of independence in the commercial banking system. The central bank however has not still been able to develop a substantial stock of domestic assets it can use to manage the money supply and in particular to offset the impact of government expenditure on the "high-powered" money base of the banking system. In the period 1960-78 a large part of the monetary base has been in the hands of the commercial banks. Most of the commercial banks' foreign assets have been liquid:

"... foreign assets retained their prominent features throughout 1972/3 with respect to both liquidity and portfolio. The high degree of liquidity was still ensured. Moreover the main components were balances with foreign banks and certificates of deposit" (33)

Since much of the commercial banks' independence was based on their foreign exchange reserves, the central bank in May 1978 decided to institute currency swap arrangements to enable it to drain liquidity by

effecting 3-month purchase and resale facilities for foreign currency. This in a way was to be the equivalent of repurchase agreements in the foreign exchange market. However, like interest bearing deposits, the swap system suffered certain shortcomings, in particular the lack of flexibility of the system which was based on rigid swap ceilings allowed for each individual bank and the inability of the central bank to exercise full control over transactions as they depended largely on the initiative and the motives of the commercial banks. None of the instruments created in the past by the central bank allowed them to improve a draining programme in the commercial banks, and the only potentially useful instrument in this respect is the CBK bill. Liquidity and the extraordinarily large proportion of excess reserves over and above statutory limits during the period 1960-78 has led us to reinterpret the notion of "high-powered" money in the Kuwait system and to class the net foreign assets of the banks as liquid assets. This does remind us of Betz's view of the currency-board economy of Malaya and Singapore, and the operations of the foreign banks in that kind of economy (34). However in the period 1978-80 the picture as we have shown is gradually changing away from these previous patterns.

iii) THE STOCK MARKET CREDIT SYSTEM AND CENTRAL BANK REGULATIONS

We saw in Chapter 4 that the stock market boom in the U.S. in the period 1920-29 produced severe disagreement within the Federal Reserve system on policy, oversimplified as a difference between the Federal Reserve Board and the Federal Reserve Bank of New York. Both, interestingly enough agreed that security speculation was cause for concern, but the difference in opinion was about the desirability of "qualitative" techniques of control designed to induce banks to discriminate against

loans for speculative purposes. The view attributed to the Board was that direct pressure was a terrible means of restricting the availability of credit for speculative purposes without unduly restricting its availability for productive purposes, whereas a rise in discount rates on open market sales sufficiently severe to curb speculation would be too severe for business in general. The conflict continued until the eve of the stock market crash and the outcome was predictably a compromise:-

"not restrictive enough to halt the bull market yet too restrictive to foster vigorous business expansion" (35)

Although the central bank in the case of Kuwait has instituted selective controls and statistics on the distribution of bank loans, as we have seen since early days almost in the manner proposed by the Federal Reserve Board in 1928, it is nevertheless difficult to control the use of funds in the proprietorship trading - companies or partnerships of individuals both of which represent the major part of the banks' client base. We saw in Chapter 4 that a large proportion of credit expansion in Kuwait is limited to investment in shares, which we saw are low-yielding investments and therefore only self-liquidating to the extent that other market participants and the government support the market enough to create a capital gain (36). We saw also in Chapter 3 that the demand for money and its structure is clearly influenced by dealing in the stock market. Time deposits for instance can be seen to be collateral against overdrafts for the most part, which are used actively for writing cheques for the trading of stocks (37). To the extent that stock market prices rise and encourage new investment credit expansion associated with stock market booms need not lead to foreign

exchange leaks (capital outflows), but when the stock market declines there is no parallel credit contraction since stocks are not usually liquidated, or if they are overdrafts tend not to be repaid and funds are transferred abroad (38).

The dangers of such a system of borrowing for stock market speculation were clear to the central bank since the very beginning of the stock market. The situation combined not only the normal dangers of stock market speculation but also the dangers of the terms on which bank customers received overdrafts, which we described in Chapter 4 as a system that could lead to illiquidity in the banking system if not controlled (39). It is clear from the discussion in Chapter 4, however, that much of the credit created for shares speculation was forthcoming from an informal credit system which we have called the "stock market credit system", which took the form of discounted personal cheques of speculators. The banks participated in this system to benefit from the yields but were not the originators of this system (40). Post-dated cheques we saw made their debut in the 1976 stock market boom but then largely disappeared again until 1978 when the size of the total float of such cheques increased exponentially and continued beyond the end of the period under study. The central bank imposed a total ban on the discounting of cheques in June 1982, but belatedly. Like the Federal Reserve System in the U.S. in 1928, the central bank perceived the dangers of the stock market boom, but unlike the Federal Reserve System it moved from early days to attempt to control the situation. However, the fact that the basic credit system that lay behind the stock market boom was uncontrollable by the central bank, meant that its policies have little influence on the outcome of events except perhaps to limit the banks' exposure to the stock market, which as we have explained, due to the difficulty of monitoring the use of loan funds in Kuwait was

sizeable in any case.

FOOTNOTES TO CHAPTER 5

- 1) See Chapter 3, pp. 100-103, but see especially pp. 119 and 123.
- 2) International Bank for Reconstruction and Development (I.B.R.D.), The Economic Development of Kuwait, (Baltimore : John Hopkins, 1965), pp.1.
- 3) See Chapter 3, pp. 100-103.
- 4) Ibid. pp. 106-107.
- 5) K.P. Wong, "A Monthly Model of Singapore's Monetary Sector", Malayan Economic Review, Vol. 19, No. 1, April 1974, pp. 46-63.
- 6) George Betz, "A Note on the Money Supply in Singapore 1957-1966", Malayan Economic Review, Vol. 12, No. 2, October 1967, pp. 116-121.
- 7) P. Drake, Money, Finance and Development, (Oxford : Martin Robertson, 1980), pp. 80-119.
- 8) See Chapter 3, pp. 92.
- 9) Central Bank of Kuwait, Economic Report for 1977, pp.47.
- 10) Ibid, pp. 47-48.
- 11) Central Bank of Kuwait, Economic Report for 1976, pp. 48.

- 12) See Graph 3:3, pp. 122.
- 13) See Chapter 3, pp. 161-166.
- 14) Central Bank of Kuwait, Economic Report for 1979, pp. 61.
- 15) Central Bank of Kuwait, Economic Report for 1975, pp. 58.
- 16) A.B. Cramp, Monetary Management : Principles and Practice, (London : George Allen and Unwin, 1971), pp. 55.
- 17) Central Bank of Kuwait, Economic Report for 1977, pp. 48.
- 18) Central Bank of Kuwait, Economic Report for 1978, pp. 59.
- 19) D.R. Khatkhate "Evolving Open Market Operations in a Developing Economy : The Taiwan Experience", in Finance in Developing Countries", ed. P.C.I. Ayre, (London : Frank Cass, 1977), pp. 92 - 101.
- 20) See Table 4:2, pp. 184.
- 21) Central Bank of Kuwait, Economic Report for 1980, pp. 54.
- 22) See Chapter 4, pp. 250-251.
- 23) Central Bank of Kuwait, Economic Report for 1977, pp. 49.
- 24) See Chapter 3, pp. 165-166.

- 25) Ibid.
- 26) See also Chapter 4, pp. 249-253.
- 27) Ibid. pp. 251-252.
- 28) Central Bank of Kuwait, Economic Report for 1976, pp. 49.
- 29) Central Bank of Kuwait, Economic Report for 1981, pp. 62.
- 30) Ibid, pp. 63.
- 31) Central Bank of Kuwait, Economic Report for 1979, pp. 62.
- 32) See Chapter 3, pp. 145-148.
- 33) Central Bank of Kuwait, Economic Report for 1973, pp.114.
- 34) See Chapter 3, pp. 95-96.
- 35) Milton Friedman and Anna Jacobson Schwartz, A Monetary History of the United States 1867-1960, National Bureau of Economic Research, (Princeton : Princeton University Press, 1963), pp.298.
- 36) See Chapter 4, pp. 267-268.
- 37) See Chapter 3, pp. 145-153.
- 38) Ibid, pp. 117-118.

39) See Chapter 4, pp. 192-194.

40) Ibid. pp. 280-283.

CHAPTER 6

THE EVOLUTION OF CENTRAL BANK POLICY IN THE CURRENCY MARKETS

i) INTRODUCTION

We have seen that there are no important benefits in Kuwait having its own independent currency and that some arguments could be advanced for the unification of the Kuwaiti Dinar with other Arab countries. In Chapter 2 we reached the conclusion that the monetary authorities in Kuwait inherited the Kuwaiti Dinar by historical accident while they do not appear to have laid great store by their independent currency, and have made certain proposals through the Gulf Corporation Council towards the possible unification of the Gulf currencies. As we shall see towards the end of this chapter, they followed a policy of stability in the management of their currency.

ii) OIL PRICING POLICY

A rough sketch of petroleum pricing policy is necessary because of the importance of petroleum in the country's balance of payments and the consequent importance for the country's trade of the decision to price petroleum in U.S. dollars. No attempts were ever made to have any part of the country's petroleum exports priced in domestic currency. While the difficulties of such a programme would be enormous because of the size of the petroleum sector in relation to the rest of the economy, the lack of interest on the part of the monetary authorities in attempting or even studying such a programme in detail, illustrates the fact that

the government never had anything except a limited role in view for the Kuwaiti Dinar. We shall see later that one of the approaches to an optimal basket for a country such as Kuwait, with a homogenous export commodity of considerable importance in the country's overall trade, is that the weights used in that country's basket peg should reflect total world trade in that commodity, rather than the direction of Kuwaiti trade. Whatever the conclusion on this particular optimal peg criterion, oil pricing policy is of fundamental importance because at some point in the monetary decision-making process (whether at the level of the Ministry of Finance which is responsible for domestic government expenditure, or at the level of the central bank) the monetary authorities will take into account that the majority of the country's earnings are denominated in the currency of invoice for petroleum.

Payments for petroleum exports used to be made in Sterling, and even after independence in 1961 payments could not practically be made in Kuwaiti Dinars due to the thinness of the Kuwaiti Dinar money-markets. From 1946 onwards, Gulf Oil and BP, the two foreign partners in the Kuwait Oil Company (KOC), each paid their contributions from petroleum revenues to the government of Kuwait through an account in London. BP paid in sterling, and Gulf Oil in dollars which were converted into sterling, all transactions being carried out at the British Bank of the Middle East in London. The royalties on petroleum in the early days were fixed in Rupees (which was as we have seen a surrogate for sterling). Before 1951, the agreement of the Kuwaiti government with KOC provided for a fixed money payment of three Rupees per long ton of crude, in addition to a few extras. The equivalent of \$36.5 million were paid as royalties to Kuwait between 1946-50 for 284.2 million barrels. A tax law was passed in Kuwait subjecting oil companies to 50% corporate profits tax in 1951, following Venezuela's precedent. This

increased government revenue considerably (Kuwait received \$60 million in 1953 alone). It was the concept of posted prices introduced in an agreement of 11 October, 1955, which introduced U.S. dollars as the reference price for petroleum.

According to the agreement of the 11th October, 1955, imputed tax values of petroleum exports in 1956-8 were to be assessed on the basis of a "posted price" per barrell rather than on actual prices received. Companies would post a price in the neighbourhood of what they might realise from the sale of petroleum, but these prices were employed merely as tax reference prices. Consequently, should petroleum prices fluctuate, the level of tax would not. Royalty payments were changed to 12.5% of the "posted price", from three Rupees per long ton. At the same time, this agreement provided for volume discounts of 8.3% of "posted prices" on petroleum sales in excess of 20 million tons per annum, valid until the end of 1958. Marketing expenses were set at 2% of "posted prices" but were reduced to 1% following the 18th December, 1958, agreement between the government of Kuwait and KOC. These changes in terms applied, and in particular the concept of the posted price, were due to the power of the large oil marketing corporations (the biggest seven were known as the "Seven Sisters") and their tendency during this period to reduce the market price of petroleum. The activities of the Seven Sisters (Standard Oil New Jersey, Texaco, Gulf Oil Corporation, Standard Oil California, Mobil Oil Corporation, Royal Dutch Shell, and British Petroleum) led to the formation of the Organisation of Petroleum Exporting Countries (OPEC). In 1959 the first Arab petroleum congress was held in Cairo, and Iran and Venezuela attended as observers but, after further oil price reductions by the oil companies, a meeting of oil exporters (including Iran, Iraq, Saudi Arabia, Kuwait and Venezuela) formed OPEC. The use of the U.S. dollar

in pricing oil began because to establish the concept of a "posted price" which in effect was an expected market price, one had to use the currency most used in the oil distribution market internationally. Subsequent to 1959, the multilateral cooperation needed in OPEC meant that there was no question of "posted prices" being in the national currency of oil exporters, and the question of the declining value of the U.S. dollar between 1970-79 was dealt with by simply increasing the "posted price".

iii) A REVIEW OF THEORETICAL CURRENCY QUESTIONS

At the beginning of Chapter 2 it was explained that the issues concerning the creation of an independent currency and those of monetary integration were quite different considerations. Consequently, we should not forget therefore that throughout discussions on currency issues, the adoption of fixed exchange rates by a country and joining a common currency area, are different situations (1). We cannot expect, for instance, currencies in a fixed exchange regime to remain aligned over long periods of time, and we should anticipate a certain degree of destabilising speculative capital flows (2). A fixed exchange regime between a group of countries is not a substitute for monetary unification and is prone to frequent and sharp exchange rate adjustment.

We established in Chapter 2 that two criteria appear in the relevant literature to determine whether an area should have a separate currency or not - 1. size and 2. social unity with contiguous areas. The question of size leading to certain indeterminacies, we concluded that social unity is a substantially more important criterion than size, although we still have to look at the effect of a country's size on its

ability to adjust to payments imbalances without a separate currency. Quite clearly the marginal propensity to import (or openness) criterion along with the price-elasticity of exports criterion (both sub-criteria of the size criterion) would make it more efficient if Kuwait were part of a common currency area.

Although we analyse the different arguments for floating and adjustable par (fixed) exchange rates in our discussion of currency management below, we shall rapidly come to the conclusion that a floating exchange rate is not relevant to the Kuwaiti situation. Certain arguments, such as the lack of proper institutional and market structures for the operation of floating exchange rates, will lead us to consider that perhaps for Kuwait as in many developing economies, adjustable parities are more desirable. The decision not to float, however, is a different one to the choice of criterion for exchange rate adjustment.

A glance at the sources and uses of funds in the Kuwaiti Dinar money market immediately makes us aware of an unusual picture that requires unusual answers. The ultimate "source" of Kuwaiti Dinars on the foreign exchange market is entirely government expenditure. In 1969, when the Central Bank was formed it was officially separated from the Ministry of Finance and Petroleum, which held and continues to hold all the country's international reserves. The Kuwait Investment Board in that year became the Kuwait Investment Office and more or less the London branch of the Ministry of Finance and Petroleum. The separation made sure that there could be no direct link between the note issue and petroleum revenues which began to outstrip the country's absorptive capacity even in the early days of petroleum production. The petroleum section of the Ministry received the revenues while the finance section made international investments and developed a plan for expenditure in

Kuwait with the aim of diversification of the country's productive base. The Kuwaiti Dinar economy can in this sense be viewed as one of the investments of the Ministry of Finance. The note issue, as we saw in Chapter 5, arises when the Ministry buys its requirements from the Central Bank with foreign currency. The major "uses" of the Kuwaiti Dinar on the foreign exchange markets are for public and private sector imports and capital exports of the private sector.

It would seem clear that being the unique source of Kuwaiti Dinars, the Kuwaiti government need not float the currency to affect sources and uses (exports, imports and capital flows) while it can use the currency to try and keep wealth accrued to the private firm being exported, which we mentioned in Chapter 2 as a relatively important goal of the Kuwaiti authorities in the historical context. We also mentioned in Chapter 2 that it was not clear whether this was a justified policy or not but we shall look more closely at this at the end of this chapter. The repatriation of Kuwaiti dollars is not, however, as we shall see, the only reason for keeping a stable exchange rate. Among other reasons, there is the factor of the large net foreign assets of the commercial banks.

iv) THE FIXED VERSUS FLOATING EXCHANGE RATE DEBATE

We shall review the classical fixed versus floating exchange rate debate to assess its relevance to developing economies, and then we shall, prior to assessing Kuwait's currency management performance, analyse some of the reasons why the classical debate is not altogether relevant to developing economies and in particular to Kuwait.

We have mentioned that fixed exchange rates can lead to speculative and destabilizing capital flows (3). Even when confidence in a permanent fixed exchange rate system allows imbalances to be financed with the minimum of fuss and difficulty, inability to induce an equilibrating move in relative costs and prices can allow marked disparities in incomes and wealth to arise, and lead to significant differences in regional unemployment rates and/or large-scale forced migration. Rare are the circumstances where local wage rates and prices vary sufficiently flexibly, relatively to each other, to maintain activity and employment in each region. Ingram (4) proposed a fixed rate system based on the Puerto-Rican experience, but Fleming (5) shows this is unrealistic in the case of a chronic deficit and implies a complete loss to the region of monetary policy as a tool to influence domestic economic activity.

The adjustment problems can be overcome within the confines of a fixed exchange rate system, even under conditions where relative real wages are slow to adjust. To do so, however, requires the adoption of appropriate fiscal policy, which would probably involve a large-scale, and often long-continued, transfer of real resources from the more prosperous region to the disadvantaged regions (6). Political realities give few grounds for believing that there is sufficient harmony among different areas to establish a permanently fixed exchange rate system, and this problem has already been mentioned in the context of our discussion of optimum currency areas. Given, therefore, that exchange rate adjustments are made necessary by such imbalances, the question arises whether the exchange rate between different areas should float (and therefore be determined by market forces), or be managed by the monetary authorities. Management of a currency can be either in the form of "ad hoc" intervention, the setting of "crawling parities"

(allowing the currency to vary within limits, and varying the limits over time), or by way of an adjustable peg which would involve sudden revaluations and devaluations. Fellner (7) makes a case for the "crawling peg" in an attempt to combine the best features of flexibility with some restraining and stabilising features of fixed parities. It was widely believed when he wrote (in 1966) that the then existing system of fixed parities with narrow margins for flexibility and infrequent changes in parity, represented a bad compromise among a number of alternative systems. We shall see below that where the fixed versus floating debate runs along lines that are irrelevant to the practical problems of developing economies, the adjustable par and crawling peg theories are proposed without any definite criterion for adjustment.

The same basic reason that allowed the Gold Standard to work in the nineteenth century allowed fixed parities to work in the immediate post-war period. Triffin (8) shows that there was a certain parallelism in the movement of the national price levels of industrialized countries in the nineteenth century, and that this was partially due to relatively similar monetary policies but also because the principal burden of adjustment fell on countries of the "periphery", producers of raw materials for the growing industries of Europe, countries which experienced adverse movements in the terms of trade whenever Britain tightened money and which often relied on changes in exchange rates to restore balance. Harmony between monetary policies to a certain extent allowed fixed parities in the immediate post-war period after Bretton Woods. However, from 1968 onwards when the Federal Reserve started to slow down gold sales to foreign central banks, the success of the fixed exchange rate system depended actually on the macro-economic stability of the U.S economy. The U.S. did not intervene much in the foreign

exchange market and allowed large dollar holdings to build up abroad as a result of balance of payments deficits. Under this system, for countries other than the U.S., incipient or actual balance of payments surpluses (deficits) had the immediate impact of increasing (reducing) money supply. On the other hand, the asymmetrical exchange rate position of the U.S. vis-a-vis other countries, where the Federal Reserve did not intervene and the U.S. dollar was an acceptable I.O.U. throughout the world, in fact acted to prevent the U.S. balance of payments deficits from automatically contracting the monetary base of the U.S. While European and Japanese balance of payments surpluses induced substantial monetary expansion, the monetary impact in the U.S. of the corresponding U.S. payments deficits was fully sterilized. This state of affairs lasted until confidence was lost and the run out of the U.S. dollar began. This was due, according to Ronald McKinnon, to the Vietnam War, and irresponsible monetary policy during the Johnson and Nixon administrations in the U.S. (9). Automatic sterilization of what McKinnon called the "centre" country's payments deficits becomes a defect in the world's monetary system only when that country itself becomes unstable. The dollar debacle of 1971-3 led to the system of floating exchanges we have had since 1973. Strenuous efforts to enforce a new legal basis for fixed exchange rates, which was agreed at the Smithsonian Institution in December 1971, had collapsed by February 1973. The present regime of free floating is subject to only the loosest kind of supervision by the International Monetary Fund (10).

So we see that the continued success of fixed exchange rates, requires either harmony of monetary policies between different areas, or one or a number of areas to take the brunt of adjustment for the rest of the world. In the nineteenth century to the extent that there was no monetary harmony, the so-called "Third World" or the "periphery" in the

terminology of Triffin paid by way of deteriorating barter terms of trade and ensuing impoverishment. In the twentieth century the U.S. took over this role but only to the extent that the U.S. dollar was a generally acceptable I.O.U., and its deficit could therefore be indefinitely financed. This only changed when the Vietnam War led to fast monetary growth in the U.S. and the value of the U.S. dollar to foreign holders was at risk. This experience teaches us clearly that questions of currency management cannot basically be unilateral decisions. The "snake" project in Europe and the ensuing European Monetary System (E.M.S.) both had to be based on the harmonisation of monetary policy between European countries if they were to succeed completely.

The basic reason why countries and more specifically governments feel the need to retain the ability to vary their exchange rate is because external developments and shocks threaten the maintenance of the internal balance. We shall see that the basic criterion of exchange rate adjustment should be the continuance of internal balance while being content to ensure that the external balance is satisfied on average over the medium term. We shall see this point very clearly in our discussion concerning the use of baskets to which to peg exchange rates. Where fiscal policy is inflexible and at the same time a fixed exchange rate does not allow monetary policy to have its full impact on the internal balance, we would have severe problems. This sort of situation is envisaged in the "policy-allocation" models, in particular Fleming (11). We analysed (in Chapter 3) the problem of the "endogeneity" of the money supply and the influence of the balance of payments through the "Polak-effect" (12), which show us the possible impotence of domestic credit expansion vis-a-vis managing the country's internal balance, in economies with fixed exchange rates. Using

deflationary measures for instance in an attempt to prevent imported inflation, may backfire by drawing more money in from abroad on the back of rising interest rates, thereby neutralizing the improvement in the external balance brought about by the initial decline in incomes. In any event, a country like Kuwait with a very high percentage of tradable to non-traded goods, would face less unemployment from pursuing a deflationary policy than countries with a higher proportion of non-traded goods. However, we must not forget that in the small open economy the price level is basically determined by world prices.

In this respect, the adoption of a regime of freely-floating exchange rates has a number of apparent advantages. If the authorities maintain some particular level of domestic demand, then usually there should be one and only one exchange rate that will allow the maintenance of an external balance consistent with the chosen internal balance. However, it may not be viable to rely on movements in the exchange rate to maintain external balance.

The currency volatility of the period 1973 onwards has been blamed on destabilizing speculation. To the popular financial press, the unexpectedly wide variations, as much as ten to thirty percent per year, in floating exchange rates since 1973 appear to be per se evidence of destabilizing speculation. In fact, this volatility is due to the absence of stabilizing speculation (13) and the fact that a market consisting of only legitimate traders and covered interest arbitrageurs (who determine the forward currency rates on the basis of interest differentials for different maturities - the Interest Rate Parity Theorem (14)) is inherently unstable. Where, in a regime of fixed exchange rates, currency speculation thrives because central banks are known to be market-makers and support the market for a currency

within pre-set prices, by contrast it disappears when such support is taken away (15). The reason that a market for foreign exchange without speculation is unstable is because of what is commonly known as the J-curve (16). If the long-term price elasticity of demand for any one country's exports should be significantly greater than unity, the long-run change in the exchange rate required to adjust to an external shock, given the level of domestic demand, should be small. But if we assume lags and rigidities in the response of suppliers, the short-run price elasticity of demand for a country's exports may be much lower, to the extent that the devaluation may lower the trade balance. The J-curve was so called because its shape indicates an immoderate decline in the trade balance of a certain country followed by a longer recovery. This is a variation on what we have called the Marshall-Lerner condition for stability in the effects of a devaluation or revaluation in the trade balance of a particular country. This condition maintains that for an exchange rate movement not to have a perverse impact on the balance of trade the sum of the elasticity of foreign demand of a country's export and local demand for imports must be greater than unity.

Why was the stabilizing speculation expected by theoretical economists of freely-floating exchanges not forthcoming?

"Under a system of greater flexibility such serious disalignments of exchange rates would never, or hardly ever, arise, and expectations of change would be confined to miniscule adjustments. Profits from small changes can only be small, inviting only moderate speculation, which can be easily discouraged, if this is wanted, by relatively minor

differentials in interest rates". (17)

Machlup was not alone in these views. Other notable economists such as Friedman, Johnson, and Sohmen (18) have maintained similar views on the gradualness of adjustment under floating rates, which they contrasted favourably with the sharp and discrete changes and one-way speculation frenzies of the old pegged-rate system. McKinnon (19) assesses that the problem was that in the furor of deciding whether speculation was going to be stabilizing or destabilizing, economists forgot to address the problem of who was going to supply the capital for such speculation.

"Exchange rates can move sharply in response to random variations in the day-to-day demands by merchants or from monetary disturbances. Once a rate starts to move because of some temporary perturbation, no prospective speculation is willing to hold an open position for a significant time interval in order to bet on a reversal Bandwagon psychologies result from the general unwillingness of participants to take net positions against near-term market movements that are necessarily accentuated by the behaviour of non-speculative merchants". (20)

Both commercial banks and multinationals limit their foreign exchange exposure and the more volatile the markets, the more they restrict and control these activities. Private individuals as a group do not have the capital or the knowledge to replace them, and hot money flows - whether by multinationals or privates - are defensive rather than speculative and may widen rather than dampen fluctuations.

The burden of stabilization in this sort of environment lays therefore with the central banks. The authorities charged with running the international monetary system, as set up at Bretton Woods, have therefore kept their attention fixed on the wrong measure. They have usually been concerned with parity levels and controlling, pegging or adjusting these levels. But they do not, and cannot, know what levels are correct; their attempts to maintain such levels lead to the imposition of distortions on the world economy (eg. via direct controls); and the occasional large-scale jumps in exchange rates to rectify an impossible situation are disruptive. Instead, their concern ought to be with the rate of change of parities, and controlling and managing this rate of change to see that it is never too large (eg. under the influence of low short-run elasticities) to represent a disruptive force.

Clearly after what we have said some form of intervention is necessary. "Crawling parities", unless they are so widely defined as to be meaningless, smell too much of the old central bank support of fixed exchanges, to be realistic. Market-making by a central bank allows it to be exploited, and therefore intervention to limit the rate of change of parities is best done on a discretionary than any automatic basis. Central banks have lost so much of their power to control rates, given the development of the international money markets, that they could be prevented from achieving the most modest targets for limiting the rate of change of rates, just as they were prevented from keeping their support levels for fixed parities in the 1960's. Discretionary central bank intervention, however, does have a role, since central banks are better informed of economic prospects and more capable of taking a long-term economic view than private speculators. Central banks should

have the opportunity to stabilize exchange rates (and make a profit in so doing).

v) THE OPTIMAL PEG DEBATE AND ITS RELEVANCE TO DEVELOPING ECONOMIES

As we said earlier conclusions such as that above that neither floating nor fixed exchange rates are sensible or even possible policy alternatives for developing economies, and that some form of intervention is necessary, are rather empty without the sort of adjustment criteria that can be deduced from the optimal peg literature and the discussion on baskets. Crockett and Nsouli correctly point out that the discussion on fixed and floating rates have been made without reference to developing economies.

Crockett and Nsouli (21) show that developing economies have preferred adjustable par values, although a significant minority have either floated their exchange rates or pegged them to a basket of currencies. Although floating exchanges, with the important provision that central bank intervention is crucial, are possibly not only workable but necessary for industrialized countries (meaning broadly speaking, OECD members) given the overall monetary conditions of the 1980's; the different economic characteristics and institutional realities in developing economies lead us to different conclusions on currency management in non-industrialised countries. Crockett and Nsouli point out that the balance of trade may be less responsive, at least in the short-run, to a change in the exchange rate, given the inelastic demand for imports and the inelastic supply of exports (22). Similarly contractionary monetary policy leading to an increase in interest rates may have very little effect on capital flows into the country. Exchange rate adjustment in developing economies may suffer from more than just

temporary instability. Central bank intervention in the case of developing economies, given the low international reserves of developing economies and their primitive capital markets would be futile in the face of long-term instability. The fact that primitive capital markets acts as an obstacle is important. The existence of efficient money and capital markets allow the "Interest Rate Parity Theorem" (23) to establish forward rates on the basis of the spot exchange rate of a particular currency through the activities of covered interest arbitrageurs. McKinnon (24) has shown that covered interest arbitrage, although it does not eliminate risk in the foreign exchange market, helps to create a great deal of natural offsetting of commercial payments, meaning that in its absence the total amount of risk (or foreign exchange exposure) would increase sharply for all market participants. To a trader, forward cover is like funding receivables in the currency to be received or booking currency ahead of time for anticipated payments. These facilities are essential for the development of trade in any economy. The literature on independent floating in developing economies generally agrees that it is an undesirable policy to pursue (25). The reasons are:-

- a) The existence of limited and rudimentary money and capital markets;
- b) Restrictions on capital flows and exchange controls;
- c) Thin foreign exchange markets against the domestic currency;
- d) Prevalence of real external shocks to primary commodity exporting economies, which would tend to have a drastic impact on the internal situation of a small open economy with relatively few

products.

We saw earlier in the case of developed economies that the management of a currency cannot be a unilateral decision on the part of one country. To a large extent, the monetary authorities of a particular country have to react to the circumstances surrounding them. The floating of major currencies since 1973 have pushed the governments of developing economies to reappraise their original currency management techniques and have made single currency pegs inappropriate. To continue to peg to a single currency (which many developing countries did) – usually either to the U.S. Dollar, the French Franc, or the Pound Sterling, had a number of disadvantages which we shall discuss when looking at the models of exchange rate management in developing economies below. Broadly speaking these disadvantages are:-

- i) Movements in the pegged exchange rate of the developing economy will not reflect actual developments in its balance of payments.
- ii) Fluctuations of the exchange rate, since they are exogenous and independent of government policy, may interfere with the pursuit of internal balance.
- iii) The use of different intervention currencies by developing economies in the same area makes difficult the promotion of intra-regional trade due to exchange rate fluctuations between these countries.

It is significant that in most cases where a single currency peg applies, the currency is pegged to a major country with sizeable bilateral aid programmes to the developing economy in question and

secondly that regions tend to peg to the same currency to overcome objection (iii) above. The examples are Latin American peg to the U.S. Dollar and the C.F.A. Franc Area. Our previous arguments that fiscal subsidies could justify common currency areas or fixed exchange rates extend to the special relationships between major industrialized nations and special groups of developing countries.

A few developing countries felt, after the collapse of Smithsonian parities, that their interests would be better served by some other exchange rate system than the single currency peg (26). Malaysia and Singapore have had an independent float since June 1973. Algeria has followed a policy of allowing its currency to move midway between its trading partners. Several countries have adopted a policy of valuing their currencies in terms of a weighted basket of the currencies of their major trade partners. Morocco pegged to a basket in May 1973, Malawi in November 1973, Algeria in January 1974, Fiji in April 1975 and Kuwait in March 1975. In the early part of 1975 several countries decided to peg to the SDR basket; these included Burma, Iran, Qatar, Saudi Arabia and eventually also Malawi. The philosophy behind this approach is to try and stabilize the effective exchange rate of a particular currency, where the effective exchange rate is a suitable average of market rates vis-a-vis the currencies of trading partners. Therefore if the single currency peg is no longer appropriate, the question becomes to what should developing countries peg, and what criteria should be used to make these decisions.

There is general agreement in the literature on the optimal peg that the choice of a peg should be made to stabilize something rather than to optimize something, except in the case of Connolly (27) whose aim is to minimize the level and variability of inflation. Branson and

Katseli-Papaefstratiou (28) suggest that the aim of choosing a basket to peg to, is to stabilize the terms of trade of the country in question since fluctuations in the terms of trade are themselves an important source of income stability. Lipschitz (29) argues, however, that most developing countries are "small" in the sense that they have no influence on their terms of trade and that such an aim is futile. It makes little sense for developing economies to reject potential windfalls let alone maintain a margin of slack in normal times so as to be able to improve their terms of trade in bad times. The usual argument is that a reduction in the variability of income may justify accepting a lower mean income. Williamson (30) shows that this formula would only cut down the peaks in income without raising the floors; the argument being that there is no way that manipulating the terms of trade can raise mean income above the level that would be possible with an optimal tariff structure. Flanders and Helpman (31) discuss two possible criteria. The first is to minimize the variance of the balance of trade subject to the expected (or desired level), and the second is to minimize the variance of real income subject to the expected level. These two criteria are incompatible since the first requires the exchange rate to be pegged to a basket weighted by underlying elasticities to stabilize the country's effective exchange rate (EER), while the second requires negative weights for countries from which there is a high import level but with which there is little competition since the appreciation of the currency of these countries would lead to a worsening in terms of trade and reduced real income at home, not compensated for by an increase in employment which normally would be due to stimulus of demand. Such an appreciation would require a depreciation of domestic currency to stimulate output and real income. Williamson (32) argues that the second criterion of Flanders and Helpman is unsatisfactory for similar reasons to the ones he extended to reject

the Branson and Katseli-Papaefstratiou criterion. He asks why would anyone wish to throw away a windfall gain in real income merely because it is temporary, and refers to consumption function theory when he states that it is expenditure rather than real income which should be stabilized based on expectations or permanent income. Connolly's criterion described above (33) of minimizing the level and variability of the rate of inflation brings us to a central consideration in the choice of a peg.

There are two distinct aspects to exchange rate policy which are:-

- i) the choice of a unit to which to peg, and,
- ii) the choice of a policy governing changes in the value at which the currency is pegged.

Connolly assumes that, if you are pegging, you would want to keep the peg fixed for years, implying that it is advantageous to peg to a currency or basket that is expected to have an inflation rate close to the domestic target (or expectation). Conversely one could say that this type of model assumes that the domestic price level is determined by arbitrage, with no scope for deviations from purchasing power parity (PPP). Almost all other models assume that arbitrage between the goods produced by different trading partners is imperfect and that changes in relative prices of the goods demanded and supplied by different countries take place in response to exchange rate changes. If PPP held then the developing economy in question should peg to the currency whose rate of inflation it liked best, however as PPP rarely does hold at least in the short-term Connolly's recommendations are invalid.

The first criterion discussed by Flanders and Helpman (34) was however acceptable. All approaches to the issues involved in the question of the optimal peg other than the ones discussed so far resemble the Flanders and Helpman approach in that they all involve pegging to a basket with the objective of stabilizing some concept of the effective exchange rate (EER) or the real effective exchange rate (REER). Stanley Black (35) builds a two-good model with traded and non-traded goods where the internal balance is represented by the market equilibrium for non-traded goods and the external balance by the equivalence of the trade deficit and exogenous capital inflows. He shows that exchange rate policy should be conducted with a view to minimize the variance of the domestic relative price of traded goods, and in the context of generalized floating this would involve the EER as the target. He defined the EER as the trade-weighted average of the bilateral exchange rates with trading partners, using direction of trade rather than currency of denomination and elasticities rather than average ratios (the precise concept of the EER is discussed below). The optimal basket in the context is the basket of currencies with the same weight as in the definition of the EER. In this sense Black recognises that a single currency peg would require much greater reserves to absorb shocks, but that intervention would be more complex and require more sophistication in the case of a basket peg. Crockett and Nsouli (36) have a similar objective to Black in that they aim to stabilize trade and output by stabilizing the EER. But in their case the main cost of pegging to a basket would be the negative impact on regional trade between developing countries with different EER's. Crockett and Nsouli recognize a competing regional trade objective and a trade-off between stability of the EER used to achieve stable output and trade and the promotion of intra-regional trade afforded by common pegs. They discuss the SDR as a common regional peg and as a proxy for their import-weighted basket.

Their argument in favour of import-weights which we shall discuss below when considering the precise concept of the EER naturally leads to the consideration of the SDR as a reasonable proxy. The main contribution of Lipschitz (37) is to have us consider the real effective exchange rate (REER), and differential inflation rates. The variance of the REER, which it is Lipschitz's objective to stabilize, can be decomposed into a term showing the variation of the EER, a term showing differential inflation, and a third interaction term:-

$$\text{Var (REER)} = \text{var (EER)} + \text{var (RP)} + 2 \text{ cov (EER.RP)}$$

where RP = relative prices

In this context, to minimize the variance of the nominal EER is not synonymous with success, it is better to allow the EER to vary with a view to offset changes in RP. Bacha (38) goes in the same direction as Lipschitz on the REER but he recognises that offsetting external instability only gives macro-stability while instability in the bilateral rates against particular currencies would remain. Lipschitz and Sundararajan (39) suggest minimizing the variance of the log of the elasticity-weighted REER, so that where there are significant covariances between internal price changes and exchange rate changes, the currency in question gets a weight smaller than its elasticity weight.

Williamson (40) asks what the rationale is behind all these models having the aim of stabilizing some concept of the EER so the REER, and cites the Bretton Woods philosophy where countries are supposed to aim at continuous internal balance, but be content to ensure that external balance is satisfied on average over the medium term. Departures from the internal balance would involve welfare costs while external

financing and reserve variation is always possible. The models discussed above, however, are not all relevant to developing economies and the important deciding factor here is the nature of the internal balance that each author concerns himself with. Black and Lipschitz in minimising the variance of the relative price of traded goods address themselves to a concept of internal balance which involves a constant level of output of non-traded goods, which is relevant to developing economies. Concepts of the internal balance involving some notion of a natural rate of unemployment would be more relevant to a Keynesian-type model, since the appropriate definition of internal balance depends on the model of the economy which is being used. In a Keynesian fix-price variable-output model, internal balance can be identified with the natural rate of unemployment modified by some margin adequate to induce a desired change in the inflation rate. Higher unemployment than that involves a waste of resources that can never be fully recouped in the future: today's unemployed cannot do today's work tomorrow. Lower unemployment risks an acceleration of inflation, the reversal of which will cost more in terms of lost output in the future than the benefits gained today.

In discussing the precise concept of the EER which we would want to stabilize, the following points have to be taken into account:-

- a) whether the weights should be based on imports, exports or total trade.
- b) whether they should be average or marginal (elasticity) weights (where elasticity is the extent of change induced in the EER by a unit change in one of the variables in the basket),

- c) whether they should reflect the direction of trade or the currency of denomination.
- d) whether we should consider the EER or REER.

In respect of the first point, Crockett and Nsouli hark back to the McKinnon "openness criterion" (41) in viewing the import-weighted basket peg as the most helpful for developing economies in that it reduces the price instability arising out of foreign exchange changes. Their argument is:-

"Since primary commodities are relatively homogenous, their prices will be set in world markets independently of the precise geographic pattern of trade. Thus, with a given volume of exports, a developing country's foreign exchange receipts will not be affected by changes in the exchange rates of the countries to which it exports. However, since industrial products are not homogenous, no uniform international price prevails. Accordingly, changes in the exchange rates of industrial countries vis-a-vis a developing country will affect the price which the developing country pays for particular industrial products". (42)

All other writers except Crockett and Nsouli argued in favour of trade weights. But the idea that developing economies export prices are typically determined on world markets which underlies the Crockett and Nsouli idea, does not take into account that many developing economies produce manufactures whose prices are formed and invoiced in currencies

of the trading partners and that currency fluctuations affect world demand for a primary product even if its price is determined on world markets. As we shall see in the following section on the implications of optimal peg theory for Kuwait, what may be true is that for a very homogeneous commodity, the weights should reflect total world trade in that commodity rather than the direction of trade of the individual country concerned. Strangely enough Crockett and Nsouli's discussion of the SDR as a common peg is probably best served by this last observation. In certain areas exporting a homogeneous commodity the trade-off between finding a common peg and stabilizing the EER may be substantially reduced by this idea. This argument is especially relevant to Kuwait and its neighbours.

In respect of point (b) above, Williamson (43) argues for elasticity weights although he agrees with Crockett and Nsouli that they may not be practicable. If we consider point (c), an objective of seeking continuous internal balance in the sense of the level of a composition of activity, and also an objective of external balance, would suggest direction of trade weights, since it is currently-quoted prices (for future delivery) and not prices agreed in past contracts (for current delivery) that influence resource allocation and trade contracts signed. In respect of point (d), Williamson (44) believes that the relative price part of the REER can be efficiently handled by (crawling) changes in the value of the peg, leaving the choice of peg to be guided by the objective of stabilizing the nominal EER. This would appear to be the most practicable approach to this issue.

vi) THE MANAGEMENT OF THE CURRENCY

The Kuwaiti Dinar started life equal to Pounds Sterling 1 or 13.33 Gulf Rupees and as we saw continued as part of the Sterling Area until 1967. In 1967, the sterling devaluation had a drastic impact on the attitude of the Kuwait government, mostly because the British government had been promising the Kuwaitis since 1964 that there would be no devaluation and that diversification of their international reserves out of sterling was not necessary. Overnight, after the devaluation of sterling, the intervention currency became the U.S. dollar (quite naturally it seemed to the Kuwaiti government since the "posted price" of oil was in U.S. dollars) and the Kuwait Investment Board diversified its holdings into U.S. dollars and European currencies. Since that day, investment of the note issue cover has been on a global basis and has been managed aggressively using almost all instruments of portfolio management available. For some time thereafter, however, sterling remained the currency in which the Currency Board, or as it became in 1969, the Central Bank, announced the daily buying and selling prices for the currency, which, had the spread between the bid and the offer not been so wide, would have led to significant arbitrage possibilities as sterling fluctuated against the U.S. dollar. By 1971, with the development of more complex markets, the U.S. dollar was not only the intervention currency but also the currency of quotation, and narrow spreads (of say 2.25% either side as required by I.M.F. standards) were being applied to the quotations.

As it turned out, the Kuwaiti Dinar did not remain pegged to the U.S. dollar, and the authorities tried to maintain its parity against gold in the period of dollar weakness (1971-5) although eventually the gold parity itself began to make the currency much higher against the U.S.

dollar, and the aim of maintaining parity against gold was eventually dropped and the Kuwaiti Dinar reduced to at least partially reflect dollar weakness. It is not surprising therefore that when we decided to regress the Kuwaiti Dinar/SDR exchange rate against the U.S. dollar/SDR exchange rate for the period January 1970 - March 1975 we had an average fit ($r^2 = 0.642$) and a coefficient for the explanatory variable (the U.S. dollar/SDR exchange rate) with a t-statistic which was not significant. Such revaluations as did take place (approximately 8% in 1971 and 12% in 1973) were, as would become typical of Kuwaiti currency management, in the interests of the relative stability of the currency vis-a-vis all its major trading partners. This can be seen by comparing the movements of the Kuwaiti Dinar with those of other currencies. Nevertheless, the Kuwaiti authorities became concerned about the long-term relationship between their currency and the U.S. dollar. In 1975, by agreement, the Gulf countries (Kuwait, Saudi Arabia and the United Arab Emirates principally) officially dropped the U.S. dollar peg. Saudi Arabia and the United Arab Emirates pegged their currencies to the SDR while maintaining bid and offer quotes in U.S. dollars. Kuwait was the only country in the Gulf to take the position officially that its currency should be pegged to a basket that would reflect some kind of trade-weighted index of the country's balance of trade. The position taken by the authorities that the Kuwaiti Dinar basket should reflect a trade-weighted position should imply that the government viewed the exchange rate as a policy tool useful mainly to fight off imported inflation rather than affect relative prices (if we are talking about bilateral trade weights). A basket was devised (supposedly on this basis) the contents of which were never publicly revealed and which we shall show below changed from time to time.

The fact that the basket changes over time is significant, and the

reason for this must be discussed to understand the philosophy behind the management of the currency. If the Kuwaiti Dinar/SDR exchange rate is regressed against the exchange rate of the U.S. dollar, Sterling, Yen, Deutschmark, Swiss Franc, French Franc, Belgian Franc, Dutch Guilder, Italian Lire, Norwegian Kroner, Swedish Kroner, and Danish Kroner, all against the SDR, and given monthly data for the period March 1975 - March 1982 then the following elasticities can be obtained in order of priority:-

	<u>Coefficient</u>	<u>t-Statistic</u>
1. U.S. Dollar	0.13950	(6.56)
2. Sterling	-0.02756	(-2.19)
3. Dutch Guilder	0.02197	(2.60)
4. Deutschmark	-0.02038	(-2.25)
5. Danish Kroner	-0.00669	(-3.70)
6. Norwegian Kroner	0.00416	(2.19)
7. Swedish Kroner	0.00303	(1.90)
8. French Franc	0.000386	(0.18)
9. Swiss Franc	-0.000144	(-0.05)
10. Belgian Franc	0.000281	(0.94)
11. Japanese Yen	0.0000844	(3.84)
12. Italian Lire	-0.0000122	(-1.75)

The t-statistics for the Swiss Franc, French Franc, Belgian Franc, Italian Lire and Swedish Kroner show that at the 99.975% level of confidence there is no significant relationship with the Kuwaiti Dinar. However, at the 99.95% level of confidence the Italian Lire and the Swedish Kroner pass the test. The t-statistic for the Swiss Franc, French Franc, Belgian Franc, however do not. Clearly the first seven of the world's major currencies appear to be the most important in terms of

the Kuwaiti Dinar basket with relationships which are significant. However, we shall see later whether it is possible that we shall consider only the first three as being relevant since currencies number (4) to number (7) could be considered to be either linked to the U.S. dollar or the Deutschmark. Although when the Kuwaiti Dinar/SDR exchange rate was regressed against the exchange rate of the twelve currencies listed above against the SDR, the fit was good ($R^2 = 0.992$) and after application of the Hildreth-Lu method autocorrelation was ruled out with a Durbin-Watson statistic of 1.97, nevertheless, multicollinearity could still be a problem and there could be interdependence between the independent variables. This, however, can be solved a priori by looking at the management of each of the currencies in the equation and determining whether the Dutch and Scandinavian currencies had at any time been linked to the U.S. dollar or the Deutschmark.

These results give us the elasticities in the Kuwaiti Dinar basket for the period March 1975 - March 1982 but they do not give us any idea of stability of the basket. Therefore, yearly tests were carried out. These tests could not be carried out over twelve months based on monthly data, due to the existence of twelve independent variables and a resulting determinacy problem. Therefore in each test we took seventeen months, from March to the following June, for each year from 1975 to 1982. In the seven tests, the U.S. dollar had the highest elasticity five times, and in the other two tests had the second highest elasticity. Sterling had the highest elasticity once, the second highest once, three times had the third highest elasticity and once didn't feature in the top four currencies. The Dutch Guilder had the second highest elasticity once, the third highest twice, the fourth highest twice, and twice was not in the top four. The Deutschmark had the second highest elasticity twice, the third highest twice, the fourth

highest once and was not in the top four on two occasions. Despite this apparent instability in the Kuwaiti Dinar basket the broad priorities established in the overall regression for the period March 1975 - March 1982 were maintained, where the U.S. dollar was clearly the most important component, followed by Sterling, the Dutch Guilder and the Deutschmark. Table 6:6 lists the coefficient results of the tests. The highest four elasticities for each test are numbered, and each coefficient whose t-statistic shows there is significance in the relationship at least at the 99.85% level of confidence is marked. However, although significance is indicated by an (S) following each coefficient to which it applies, for these shorter-term tests, this should not be given too much importance, in that all that the lack of significance indicates is the possibility that over a number of tests in the long-term, the relationship established may not hold. Significance should therefore be read in the context of the overall test for March 1975 - March 1982, as there are actually one or two surprising results.

The multicollinearity problem posits the question of the possible relationship between the independent variables. In particular the results on the role of the Dutch Guilder in the Kuwaiti Dinar basket have to be discussed in the context of this problem. Further instances of this problem may be the high elasticities that the Norwegian Kroner displayed between March 1975 - July 1976 (second highest) and between March 1976 - July 1977 (fourth highest), and that the French Franc displayed between March 1975 - July 1976 (fourth highest), March 1977 - July 1978 (fourth highest), and in particular in the period March 1979 - July 1980 when it showed the highest result for all currencies. The Swiss Franc, which usually in most tests displayed very small coefficients, produced a high result for the period March 1978 - July 1979 (the fourth highest elasticity). Certainly this last result for

the Swiss Franc is difficult to explain, but all the others can be explained by virtue of the history of that particular currency's management in the period in question. The "snake" followed by the EMS had grouped together the Deutschmark, Dutch Guilder, Belgian Franc, French Franc, and Italian Lire. Traditionally the Dutch Guilder and the Deutschmark have been the stronger of this group of currencies and have therefore both been at the ceiling of the EMS "bands". The Dutch Guilder has always been statistically strongly linked with the Deutschmark, hence the similar apparent importance of both in the Kuwaiti Dinar basket. Although the French Franc has often been among the weak currencies in the EMS group in the years 1975, 1977 and 1979 it performed well and maintained its strength in the EMS group of currencies.

vii) IMPLICATIONS OF THE OPTIMAL PEG DEBATE FOR KUWAIT
AND THE SDR AS A COMMON REGIONAL PEG

The Kuwaiti Dinar was originally intended, according to government statements, to be pegged to a basket reflecting the country's trade-weighted position.

"After the second devaluation of the U.S. Dollar in 1973 and up to 17 March, 1975, Kuwait continued to peg the Kuwaiti Dinar to the U.S. dollar..... Because of this, the heavy depreciation of the U.S. Dollar in the world exchange markets in the first quarter of 1975 pulled down the value of the KD... In order to arrest this trend and to maintain greater stability of the exchange value of the KD, the Kuwaiti authorities broke the KD's firm link with the U.S. Dollar on 18 March, 1975, and adopted

TABLE 6:1

IMPORT WEIGHTS FOR KUWAIT'S MAJOR TRADING PARTNERS, IN PERCENTAGES, 1975-1982
(Annual Data Calculated From The Third Quarter)

	3/1975	3/1976	3/1977	3/1978	3/1979	3/1980	3/198	3/1982
United States	23.33	24.51	20.75	19.53	19.50	21.38	19.75	19.98
United Kingdom	12.10	14.44	11.05	15.27	15.86	14.10	13.67	10.45
Belgium	3.01	1.73	2.14	2.53	2.25	2.01	1.48	1.55
Denmark	1.86	1.33	1.39	1.24	1.45	1.88	1.63	1.45
France	4.96	4.87	7.07	4.41	5.29	5.81	5.18	5.06
Germany	16.73	15.75	15.72	13.35	13.08	11.68	12.73	15.85
Italy	6.27	6.35	6.50	7.74	9.19	8.66	9.45	9.53
Holland	3.11	2.71	2.22	3.23	2.68	2.42	2.28	2.20
Norway	-	-	-	-	-	-	-	0.12
Sweden	1.49	2.01	1.49	1.50	1.37	1.98	1.50	1.67
Switzerland	2.00	1.63	1.56	1.70	2.09	1.69	1.60	1.88
Japan	25.14	24.67	30.11	29.50	27.24	28.44	30.73	30.26
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : International Monetary Fund, Direction of Trade Statistics Yearbook

TABLE 6:2

EXPORT WEIGHTS FOR KUWAIT'S MAJOR TRADING PARTNERS IN PERCENTAGES 1976-1982
(Annual Data Calculated From the Third Quarter)

	3/1976	3/1977	3/1978	3/1979	3/1980	3/1981	3/1982
United States	1.49	1.91	2.25	1.87	1.65	4.39	1.62
United Kingdom	12.00	18.28	15.53	11.85	15.73	16.43	10.10
Belgium	0.62	-	-	0.12	-	1.86	0.03
Denmark	0.28	0.20	0.05	0.33	-	0.31	-
France	20.57	9.16	4.85	4.70	7.12	7.70	2.72
Germany	1.73	1.27	1.70	2.05	2.13	4.23	2.65
Italy	4.79	8.78	14.64	16.35	12.60	6.41	2.67
Holland	14.14	18.90	13.17	16.66	21.69	16.32	12.08
Norway	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-
Switzerland	0.53	-	-	-	-	0.13	0.13
Japan	43.85	41.50	47.70	45.97	39.08	42.22	68.00
	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : International Monetary Fund, Direction of Trade Statistics Yearbook

TABLE 6.3

BILATERAL TRADE WEIGHTS FOR KUWAIT'S MAJOR TRADING PARTNERS IN PERCENTAGES, 1976-1982
 (Annual Data Calculated From The Third Quarter)

	3/1976	3/1977	3/1978	3/1979	3/1980	3/1981	3/1982
United States	7.26	8.32	8.72	7.71	6.52	10.08	11.51
United Kingdom	12.61	15.82	15.43	13.24	15.32	15.40	10.28
Belgium	0.90	0.73	0.95	0.84	0.52	1.72	0.85
Denmark	0.55	0.61	0.50	0.71	0.45	0.80	0.78
France	16.63	8.45	4.75	4.89	6.78	6.76	3.98
Germany	5.25	6.19	6.07	5.71	4.49	7.38	9.76
Italy	5.18	8.00	12.05	13.98	11.62	7.53	6.37
Holland	11.27	13.22	9.44	12.03	16.93	11.12	6.76
Norway	-	-	-	0.01	0.01	-	0.07
Sweden	0.50	0.51	0.57	0.45	0.49	0.56	0.90
Switzerland	0.81	0.53	0.64	0.69	0.42	0.69	1.07
Japan	39.05	37.62	40.88	39.74	36.45	37.96	47.67
	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : International Monetary Fund, Direction of Trade Statistics Yearbook

TABLE 6:4

BILATERAL TRADE WEIGHTS BY CURRENCY OF DENOMINATION IN PERCENTAGES 1976-1982
(Annual Data Calculated From The Third Quarter)

	3/1976	3/1977	3/1978	3/1979	3/1980	3/1981	3/1982
U.S. Dollar	81.07	73.00	69.85	73.36	80.55	70.27	56.86
Sterling	3.62	3.76	5.72	5.25	3.49	5.06	5.63
Belgian Franc	0.43	0.73	0.95	0.75	0.50	0.55	0.84
Danish Kroner	0.34	0.47	0.46	0.48	0.45	0.60	0.78
French Franc	1.22	2.41	1.65	1.75	1.44	1.92	2.73
German Mark	3.95	5.35	5.00	4.33	2.89	4.72	8.54
Italian Lire	1.59	2.22	2.90	3.04	2.14	3.50	5.14
Dutch Guilder	0.68	0.75	1.21	0.89	0.60	0.85	1.19
Norwegian Kroner	-	-	-	-	-	-	0.07
Swedish Kroner	0.51	0.52	0.57	0.45	0.49	0.56	0.90
Swiss Franc	0.41	0.53	0.64	0.69	0.42	0.59	1.01
Japanese Yen	6.18	10.26	11.05	9.01	7.03	11.38	16.31
	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : International Monetary Fund, Direction of Trade Statistics Yearbook

This table assumes all imports are invoiced in the currency of the country of origin (see text).

TABLE 6:5

CRUDE OIL TRADE WEIGHTS (IMPORTS AND EXPORTS) OF THE WORLD'S MAJOR ECONOMIES IN PERCENTAGES, 1976-1982
(Annual Data Calculated From the Third Quarter)

	3/1976	3/1977	3/1978	3/1979	3/1980	3/1981	3/1982
United States	26.67	31.41	30.96	30.10	28.88	27.26	24.96
United Kingdom	8.41	7.64	7.76	8.19	8.08	9.11	10.80
Belgium	2.73	3.08	2.95	2.81	3.16	3.09	3.06
Denmark	0.72	0.67	0.66	0.70	0.60	0.60	0.58
France	11.33	10.22	10.51	10.80	10.57	10.38	9.87
Germany	9.31	8.83	8.45	9.07	9.43	9.29	9.08
Italy	9.56	8.93	9.43	9.61	8.83	9.45	10.04
Holland	5.75	5.28	4.74	5.07	4.95	4.44	4.57
Norway	2.05	1.68	2.01	1.89	2.24	2.42	2.61
Sweden	1.39	1.19	1.40	1.33	1.66	1.67	1.66
Switzerland	0.38	0.39	0.35	0.35	0.37	0.36	0.44
Japan	21.70	20.68	20.78	20.08	21.23	21.93	22.33
	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : International Monetary Fund, Direction of Trade Statistics Yearbook

TABLE 5.8

RESULTS OF REGRESSION TESTS BETWEEN THE KUWAITI DINAR AND OTHER MAJOR CURRENCIES 1975-1982
(MONTHLY DATA)

	3/1975-3/1976	3/1976-3/1977	3/1977-3/1978	3/1978-3/1979	3/1979-3/1980	3/1980-3/1981	3/1981-3/1982
U.S. Dollar	(1) 0.23433 (S)	(1) 0.22134 (S)	(1) 0.18987 (S)	(1) 0.21351	(2) 0.14258	(2) 0.10289 (S)	(1) -0.36089 (S)
Sterling	(3) 0.000881	(3) -0.007922	(3) 0.04623 (S)	0.007525	0.02769	(1) -0.17658 (S)	(2) 0.13422
Japanese Yen	0.0000231	0.0000432 (S)	-0.000035	0.000189	0.000245 (S)	-0.000056 (S)	0.00016
Deutschmark	0.0025437	(2) -0.03261 (S)	0.02306 (S)	(2) 0.05689	(3) -0.09870 (S)	(3) -0.09188 (S)	(4) 0.006726
Swiss Franc	-0.00011477	-0.0002092	0.008812 (S)	(4) -0.02544 (S)	-0.07518 (S)	-0.0088465 (S)	-0.000633
French Franc	(4) 0.0034559	0.004592 (S)	(4) 0.02928 (S)	0.02179	(1) 0.14773 (S)	0.01486 (S)	-0.003416
Belgian Franc	0.0012025	0.004940 (S)	0.00498 (S)	0.0009407	-0.00518	0.00002	-0.00064
Dutch Guilder	-0.0025656	0.0000271	(2) 0.08406 (S)	(3) -0.03799	(4) -0.0922	(4) -0.05632 (S)	(3) 0.01420
Italian Lira	0.000002	0.000023	0.000041 (S)	0.000214 (S)	0.00002	-0.00003 (S)	0.00007 (S)
Norwegian Kroner	(2) 0.01038 (S)	(4) -0.006663	0.000131	0.01319	0.05614 (S)	0.00653 (S)	0.00137
Swedish Kroner	0.002118	0.001482	0.009154 (S)	-0.016737	0.03531 (S)	0.02894 (S)	-0.001182
Denish Kroner	0.003009	0.001307	0.0104 (S)	-0.005587	0.00673	0.004141	0.004706

Source : International Monetary Fund, *Direction of Trade Statistics Yearbook*

an independent exchange rate policy. According to this new policy the exchange rate for the dinar has been determined by giving weight to the performance of a basket of major currencies through which Kuwait's main international transactions are carried out". (45)

We enumerated earlier in the discussion on the optimal peg the various points to consider when determining an "effective exchange rate" (EER) for the country which would become the target to which to peg the currency. In determining the weights in a basket that would represent the EER we should consider:-

- 1) whether the weights should be based on imports, exports or both,
- 2) whether they should be average or marginal (elasticity) weights,
- 3) whether they should reflect the direction of trade or the currency of denomination, and,
- 4) whether or not we should consider an inflation differential factor in some form of "real effective exchange rate" (REER) construct.

We shall follow the idea that a relative price or inflation differential content in the country's EER can be dealt with by [crawling] changes in the peg. What we should decide is the relative sizes of the weights to be used in the basket of currencies at any one time. In respect of point (2), clearly elasticities would be theoretically more appealing in our construct, but the lumpiness and erratic nature of trade data

does not allow us to produce meaningful results on this basis. We have therefore made our calculations on an average basis although we look at and analyse weights based on imports, exports, and bilateral trade and furthermore, both as direction of trade and as currency of denomination.

Table 6:1 shows us what an import-weighted basket should be like. Japan and the United States, followed by the United Kingdom and Germany, are the most important exporters to Kuwait over the period 1975-1982. Table 6:2 demonstrates the slightly different weighting and implications for the optimal peg that would result from an analysis of the distribution of Kuwaiti exports. Japan, followed by the United Kingdom and Holland, are the three most important countries in this context, but Japan considerably more so than any other, averaging as it did a share of between 39% and 68% of Kuwaiti exports. If we are to follow the arguments of the preceding discussion on the optimal peg, and the conclusions of that discussion, that a bilateral trade index should be the most efficient basis for determining a set of basket weights for the Kuwaiti Dinar, then Table 6:3 shows us that the leading trading-partner of Kuwait is Japan, followed in order of importance by the United Kingdom, Holland, Italy, the United States, France and Germany. Table 6:3 intends to show bilateral trade weights for Kuwait based on the direction of trade principle. If we are to use the currency of denomination, and specifically assume that each country invoices in its own currency while all crude oil (and therefore all exports) is invoiced in U.S. dollars, then the United States replaces Japan as the major trading partner. We can see this in Table 6:4. However, we can also see in this table that Japan (followed by the United Kingdom) remains the second most important trading partner. A remarkable feature of all the trade data is the stability of the relative positions over time of each of Kuwait's trading partners whether in the import, export or

bilateral trade weight tables.

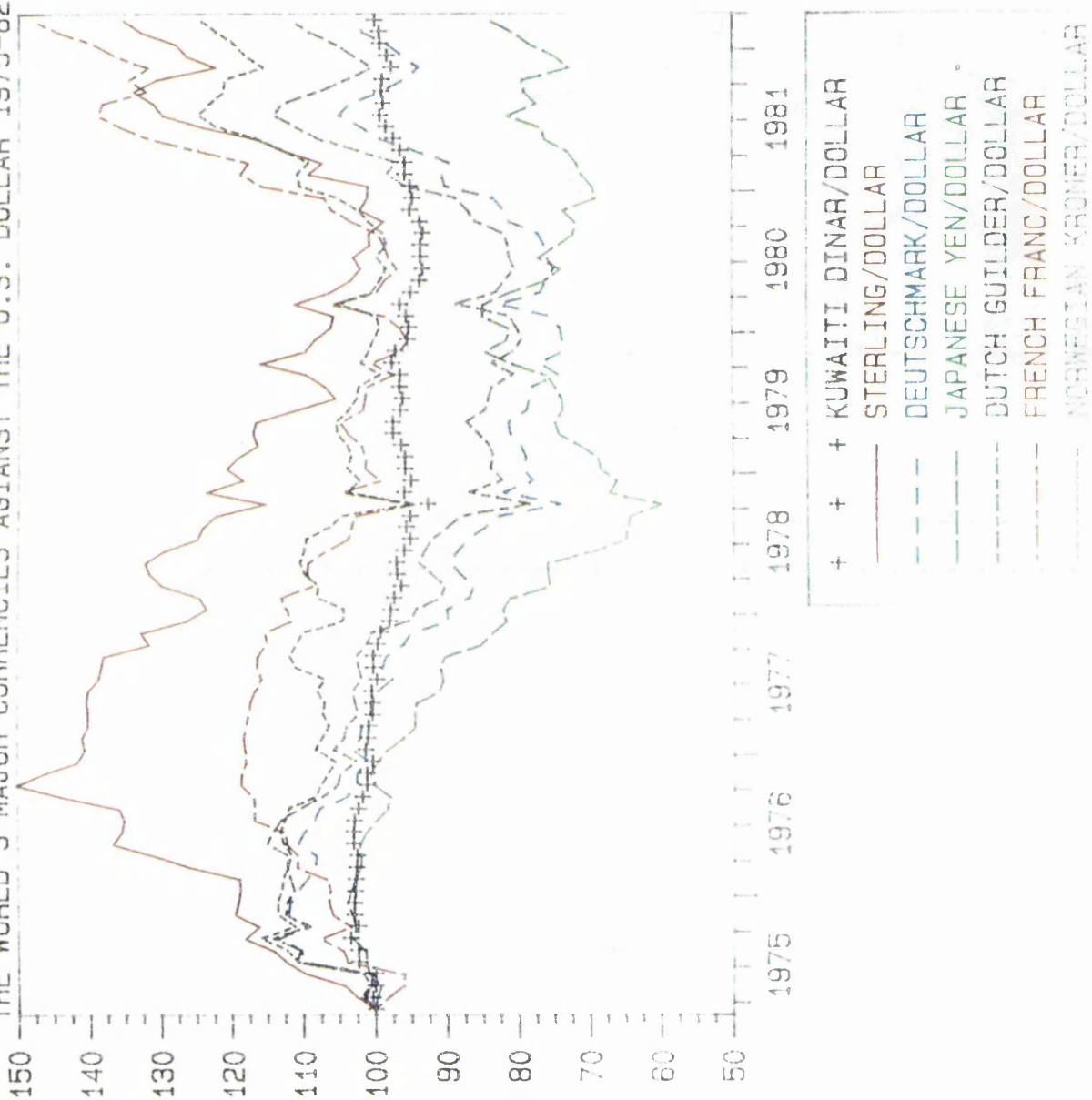
Government statements at the time of the adoption of the basket (March 1975) might have implied that a bilateral trade index was the basis of the proposed Kuwaiti Dinar basket because the emphasis of the government statement was at the time on the aggregate flows of the sale and purchase of different currencies in the foreign exchange market for the dinar. A currency of denomination index might even be suggested by such a statement. Clearly the basket was not import-weighted, since according to a Central Bank statement, in 1976 the Kuwaiti Dinar performed better, vis-a-vis the U.S. dollar, than it would have done if it had been based on an import-weighted index, by a factor of 6.8% (46). In 1977, however, the Central Bank noted that the Kuwaiti Dinar performed less well than the import-weighted index (by 6.6%) in a year of relative strength for the Deutschmark, the Swiss Franc and the Yen (47).

The results of our earlier analysis of the behaviour of the Kuwaiti Dinar do not, however, when placed in the context of trade figures, allow us to reach any easy conclusions. Time series analysis of both currencies and trade did not unearth complex trends, on the contrary patterns in each case proved continuous and relatively steady. The difficulty lies in reconciling the central bank's currency management policy with the concepts we have developed of trade weighted baskets, given that, according to government statements, as we have shown, this was the intention behind the break with the U.S. dollar in March 1975. The apparent insignificance of the Japanese Yen in the composition of the Kuwaiti Dinar basket seems to belie the central bank's use of either import-weighted, export-weighted or bilateral-type baskets. Table 6:4 attempts to analyse bilateral trade by currency of denomination rather

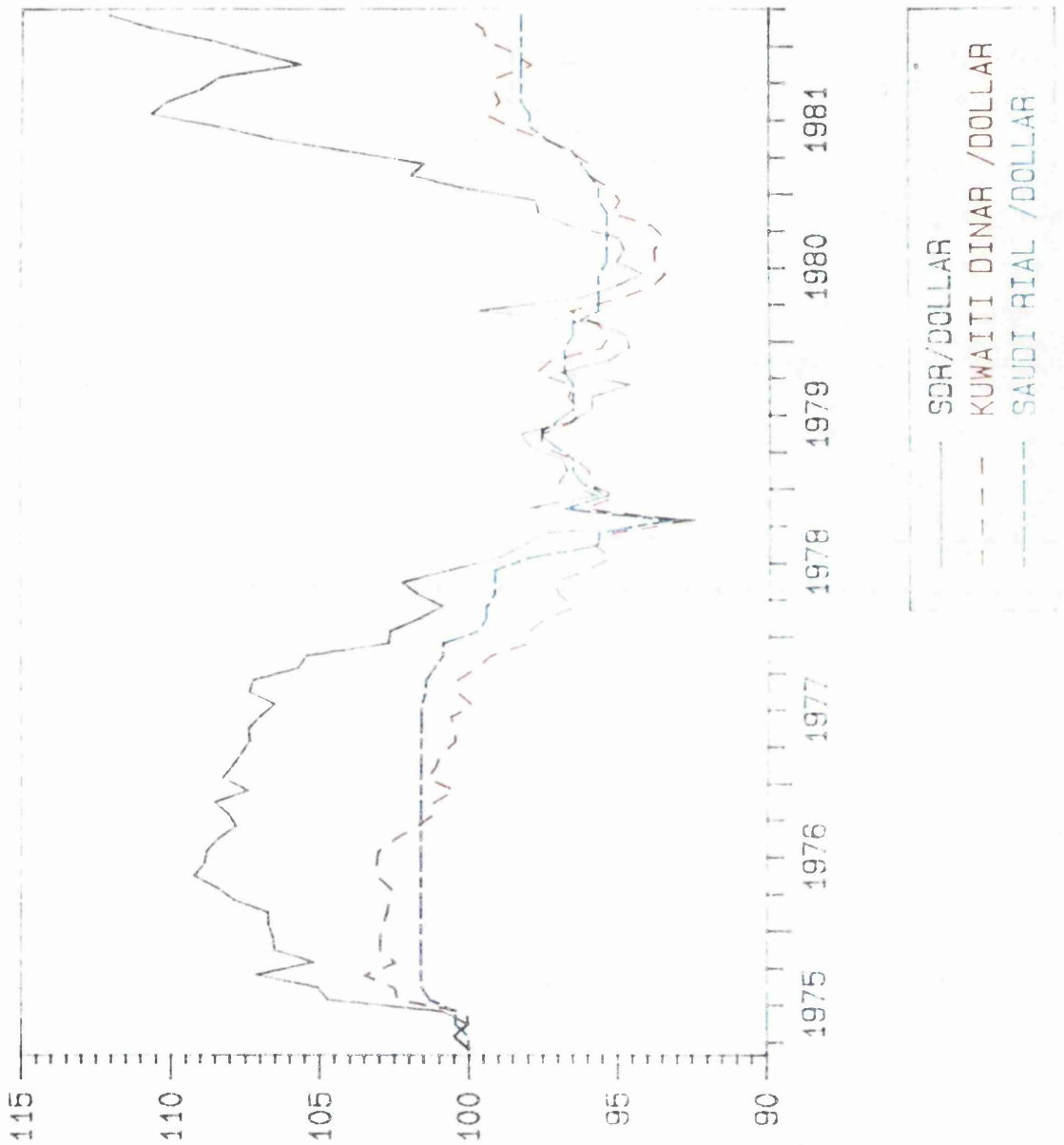
than direction of trade, assuming simplistically that all invoices would be denominated in national currency of the exporter, while assuming less simplistically (more realistically) that all Kuwaiti exports, which are mainly of crude and refined oil, are invoiced in U.S. dollars. On this basis the overriding importance given to the U.S. dollar, which is not justified by all the direction of trade concepts, seems to gain some kind of basis, however the Japanese Yen would, by this system, have to have a greater weight than sterling and the Deutschmark. To make assumptions about currency of denomination is, however, rather dangerous. It could be that much of Japan export is denominated in U.S. dollars. What is more certain, however, is that imports connected to project awarded by the central government of Kuwait are subject to Kuwaiti Dinar contracts. Table 6:5 sets out the weights that would be accorded to each currency in the optimal basket if the argument was followed, which was discussed in the section on the optimal peg, that, for a homogeneous primary export commodity, trade-weights in the "effective exchange rate" should reflect total world trade in that commodity rather than the direction of trade of the individual country concerned. Japan yet again proves to be an important factor in this new context, in fact a factor almost equal to the United States. Clearly this scheme also does not apply to the management of the Kuwaiti Dinar.

What was most revealing, however, in our analysis of the movements of the Kuwaiti Dinar, was that, whereas all trade weights remain remarkably stable, the elasticities connected to each of the world's major currencies in the Kuwaiti Dinar regression equations, are changing over time without being chaotic. This "changeability" factor in the management of the Kuwaiti Dinar existed well before 18 March, 1975, when the concept of the "basket" was adopted, when we saw the various revaluations in the period of the dollar peg. The notion of the dollar

GRAPH 6: 1
 INDEX OF THE CHANGES IN THE RATE OF EXCHANGE OF THE KUWAITI DINAR AND
 THE WORLD'S MAJOR CURRENCIES AGAINST THE U.S. DOLLAR 1975-82



GRAPH 6: 2
INDEX OF THE CHANGES IN THE RATE OF EXCHANGE OF THE SDR, THE KUWAITI
DINAR AND THE SAUDI RIAL AGAINST THE U.S. DOLLAR 1975-82



peg seemed to mean at the time a kind of short-term reference point for the management of the currency, but not a long-term intervention currency. There is no reason why the same could not be true of the management of the currency in a period of basket-pegging, where the weights attached to the chosen currencies are altered. We have seen, however, that neither the choice of the currencies nor of their weights were linked in any specific fashion to trade-type indices. It would seem that a policy of maintaining "stability" of the currency in the face of foreign exchange fluctuations continued from the pre-1975 dollar era, and that the U.S. dollar, Sterling and the Deutschmark were chosen as components of an intervention basket, simply to avoid following the vagaries of one major currency. Even if this did not work vis-a-vis other currencies the weights could be altered.

If we look at Graph 6:1 the stability of the Kuwaiti Dinar/U.S Dollar exchange rate by comparison with the exchange rate of any other currency with the U.S. dollar is clear. Graph 6:2 shows another interesting fact, namely that the short-term movements of the Kuwaiti Dinar/U.S. Dollar exchange rate seems to be influenced by the movements in the SDR/U.S. Dollar exchange rate, although it would seem to be the case that the high U.S. Dollar weighting in the Kuwaiti Dinar basket did not allow it to be influenced very much. The remarkable fact that Graph 6:2 does show, however, is that the Saudi Rial is even more stable vis-a-vis the U.S. Dollar than the Kuwaiti Dinar, although in 1975 the Saudi government declared that it had tied its currency to the SDR. This brings us to the point about the possibility of using the SDR as an efficient regional currency peg. Clearly in the case of Kuwait and Saudi Arabia (as we recall the discussions about the possibility of integration of the Gulf currencies in Chapter 2) there is a great deal of coordination in currency management. However, they, and particularly

Saudi-Arabia, evidently did not follow the SDR.

Let us analyse some of the reasons behind the policy of the Kuwaiti government in respect of the currency. A number of pertinent remarks were made in Khouja and Sadler's book on this issue.

"While the composition of the basket has never been disclosed, it seems certain that the dollar has the most important weighting. This has had significant repercussions with the recent fall of the dollar. Due to this heavy weighting, the Kuwaiti Dinar has not appreciated against the dollar as much as some other major currencies. This seems to reflect in part the policy of the central bank in avoiding major revaluations in the KD in order to safeguard the financial position of the banking system which has sizeable dollar holdings" (48)

There are three main reasons that we have isolated as being of major importance in the central banks' currency policy:-

- i) The need to encourage the private sector in Kuwait to keep their wealth in Kuwaiti Dinars in the Kuwaiti banking system.
- ii) The encouragement of foreign entities to borrow in Kuwaiti Dinars through the local bond market and therefore to help develop an important local financial industry.
- iii) The protection of the banking system, which despite the swap facilities of 1978, had a large foreign exchange exposure in

particular in U.S. Dollars.

Points (i) and (ii) are self-explanatory in that a stable currency attracts risk-averse investors and borrowers. Clearly in the first case we have already seen that it was Kuwaiti government policy to encourage the repatriation of "Kuwaiti Dollars" that had leaked abroad from earlier schemes to distribute wealth such as land acquisition and to encourage existing wealth to remain in Kuwait, which schemes the I.B.R.D. had frowned upon as a system to encourage development (49). We have analysed in Chapter 4 the reasons for the establishment and encouragement of the stock exchange in Kuwait, which was a direct result of I.B.R.D. criticisms in the early days 1961-5. The stability of the currency was viewed as an element as important as the Stock Exchange in promoting private sector investment in Kuwait. Whether this is a justified policy for the maintenance of a stable currency for the circumstances that Kuwait finds itself in, is a different question. Clearly a repatriation of Kuwaiti dollars leads to an increase in the foreign exchange holdings of the central bank or the commercial banks, and this is not a necessary aim of Kuwaiti monetary policy given the country's surpluses. However, the aim of diversification of the country's productive base through private sector investment does require that the wealth accrued to the private sector does not immediately leave the country, and those balances invested abroad be increasingly invested locally.

Also, although less important and less a conscious motive of government policy, it has been government policy to encourage foreign investment by Kuwaiti institutions in Kuwaiti Dinar denominated securities issued by foreign borrowers. Most immediate as a problem, however, was the banking system's net foreign assets which traditionally made the banking

system vulnerable to foreign exchange fluctuations. The nature of Kuwait's financial sector as a surplus entity as we saw in Chapter 3 meant that a considerable amount of placement of funds abroad was necessary.

The central bank's chief concern up to 1978 had been to extract liquidity from the system. It has therefore encouraged the banks to continue to increase their traditional tendency to invest abroad. From the short-term point of view, that of the management of the money supply, therefore, the aims of the government and those of the central bank have been opposed in that the government's objective has been to maximise domestic investment. Chapter 3 clearly illustrates this conflict, where the central bank seems powerless to abate the inflationary consequences of government expenditure. Some evidence of these inflationary consequences was provided in Chapter 5, where we quoted several passages from the Central Bank of Kuwait Economic Reports to demonstrate the extreme concern showed by the central bank over these issues. The report issued in 1977 plainly described the central bank's main task as being that of limiting the inflationary consequences of government expenditure and the subsequent rapid growth of credit. Meanwhile, the report of 1976 makes direct reference to the fact that the fast expansion of domestic liquidity, in the words of the report, "outpaces productive economic activities in the local economy". The report of 1975 refers to "alleviating growing speculation", even before the stock market boom of 1976. Similar accounts of inflation and speculation and the central concern over these matters abound in the reports. The fact that government expenditure through land acquisition or stock market support is seen as the main cause of these problems is always explicitly stated as a matter of fact. The structural inflationary pressures in the local economy were concentrated in

commercial and residential real estate, and as we saw earlier in Chapter 4 (50), this was the main cause of the stock market boom in 1976. These inflationary policies pursued by the central government in Kuwait would have increased imports through "wealth" effects, which might have been as important a factor in the rise of imports, as increasing national income. Our analysis in Chapter 2 (51), based on J.R. King's book on Kenya, showed that in a country with a high proportion of tradable goods and where the domestic price level is mainly influenced by the world price level, devaluation is an important tool of adjustment. But in the Kuwaiti context, the fast rises in imports never led to a serious need for balance of payments adjustment in the period under study, due to the country's high (exogenous) surplus.

The switching of funds from abroad to the domestic Kuwaiti economy by the banking system, as local lending opportunities increased and became more attractive, particularly worried the central bank. Continued placement of funds abroad by the banking system and outflows of private capital was in their eyes, the best policy to abate the inflationary consequences of monetary expansion. But as we see in the last section of Chapter 3 (52), local domestic credit expansion had a much lower external leak through increased imports (and perhaps capital outflows, although, for the reasons outlined in Chapter 3, we considered capital outflows to be exogenous), than might have been expected in a country like Kuwait, with such a high percentage of tradables in the National Product. If we look to imports as the only endogenous leak, then perhaps this phenomenon might be explained by the country's low population and the saturation of the local market with imports, in which case a linear import demand function might not be the most accurate description of import propensities in Kuwait.

The stability of the Kuwaiti Dinar might probably have had more to do, in the particular context of the central bank, with protecting the net foreign asset position of the banks than the long-term aim of repatriating "Kuwaiti Dollars". The overall policy of repatriating "Kuwaiti Dollars" was probably a primary aim only in the years before 1973. Rapid monetary expansion after 1972, and the floating of all major currencies after 1973 probably were the main factors that put the protection of the foreign assets of the financial system at the top of the list thereafter. Also in some years, notably 1979/80, although also in previous years, this stability in the exchange rate worked to drain liquidity from the system and to create capital outflows due to substantial interest arbitrage, because local interest rates remained fixed in the face of large rises in international interest rates. Borrowings would rise and the funds would be exported to take advantage of higher interest rates abroad, without much anxiety on the part of the speculator about the stability of the Kuwaiti Dinar. A fourth and last possible factor to be mentioned in the management of the currency, which has not been quoted in any specific place but has been the subject of discussion, is to do with the central bank as a department of the central government and more specifically, the Ministry of Finance. Since, as we saw in Chapter 3, one of the sources of Kuwaiti Dinars is government expenditure from foreign exchange reserves, the value of the local currency with respect to these reserves may indeed be an issue for the Ministry of Finance. Certainly the choice of the U.S. dollar, Sterling and the Deutschmark as the major components of a basket may reflect to some extent the composition of the Ministry's portfolios. Statistics on these portfolios are not readily available to make the comparison, but this can be viewed as a supplementary consideration to the protection of the value of the foreign assets of the banks in terms of the local currency.

In any event the policy of a stable currency has not reduced capital outflows as planned because the "exogenous" element of capital movements due to political motives cannot be influenced by this and the "endogenous" element is encouraged on occasions by the stability of the currency when arbitrageurs react to yield differentials due to the rigidity of domestic interest rates. This has led to discussion about floating the Kuwaiti Dinar. The attraction of doing this is immediately obvious as it should, in theory, insulate the monetary system from the balance of payments and reduce "endogenous" capital outflows, and might therefore achieve the government's target of repatriating "Kuwaiti Dollars" while discouraging arbitrage. But there are a number of considerations which make floating the Kuwaiti Dinar unattractive, apart from the imperatives immediately facing the central bank which we have just discussed above:-

- a) Miles [53] shows that for Canada in the Post-War period, in periods of floating exchange rates capital flows reacted to interest-differentials. When substitutability on the supply side is suspended, domestic and foreign currency (or in this case the U.S. Dollar and the Canadian Dollar) become substitutable on the demand side. The implication of those results for Kuwait is that floating exchanges will not eliminate capital outflows based on a "transactions" or "precautionary" demand for foreign currency although they might mitigate the effects of the "speculative motive". In Kuwait the "exogenous" element of capital flows is based on a "precautionary" demand for foreign currency based on political fears where the physical location of the money balance is important, hence occurring even under conditions of fixed exchange rates. No specific currency regime therefore can have a

role in repatriating "Kuwaiti Dollars" that have left the country for political reasons.

- b) Properly functioning foreign exchange markets require a broad base to ensure stability. An unstable domestic currency will encourage trade to use foreign currencies, hence undermining the future of the domestic currency and leading us into a vicious circle. The pre-requisites to stability of a foreign exchange market still on the road of development are (i) central bank intervention and (ii) efficient forward markets.
- c) Central bank intervention of a sensitive nature can only succeed when a broad government securities market exists so that the monetary authorities can buy or sell domestic assets on a daily basis, for any amount, to destroy or create the domestic currency needed for the sale or purchase of foreign currency. In Kuwait the likelihood is that speculators would raise the Kuwaiti Dinar to unreasonable heights and the monetary authorities would not have the necessary domestic asset base to effect substantial sales of local currency to stabilize the exchange rate.
- d) Efficient forward markets, as we have seen in this section, depend on developed capital markets and free interest rate structures, since on the interest parity principle, interest differentials determine premia and discounts from spot in various maturities of the forward markets.

The above arguments lead us to the conclusion that interest rate reforms should predate any ideas about reforming exchange rates. This does not mean that pegged exchange rates are recommended as policy per se.

Interest rate reforms would expand the domestic reserve asset ratio, and would form the basis for the sale of for instance the Central Bank bills proposed in 1978 that could form the nucleus of a government securities market in the future. Khatkhate (54) has shown that government tampering with yields on new issues of securities has led to the failure of the market in Taiwan. Free interest rates would make forward markets possible in the local currency, and an expanded domestic asset base and government securities market would make Central Bank intervention in the foreign exchange market possible. An additional bonus from such a reform of interest rates would be an allocational improvement in savings in the economy in the "conduit" and "repression" literature sense.

We conclude that appropriate policy in Kuwait would involve a basket peg of the bilateral type and freely fluctuating interest rates, until such time as the free interest rate regime will have allowed the banking system to develop to the extent that it can manage a floating currency in the manner described in points (a) - (d) above. The free interest rates would prevent disruptions of the banking system as are caused by arbitrage capital flows and would provide the basis for the central bank developing a domestic asset base to back the monetary system's "high-powered" money base and for it to develop more control over bank reserves. Most importantly, however, expanding local money and capital markets would enable the central bank to develop a forward exchange market, more ambitious than the existing swap facilities, that would allow the commercial banks to hedge their foreign exchange exposure. Overall, however, we must emphasise that the institutional structure of Kuwait (the separation of the roles of the Ministry of Finance and the Central Bank) automatically insulates the monetary system from the balance of payments, and while "exogenous" capital flows could not be stopped, free interest rates would greatly reduce "endogenous" capital flows. Given the institutional structure we describe, however, there is no immediate reason to float the Kuwaiti Dinar.

FOOTNOTES TO CHAPTER 6

- 1) Egon Sohmen, "The Assignment Problem", in Monetary Problems of the International Economy, eds. R.A. Mundell and A.K. Swoboda, (Chicago : University of Chicago Press, 1969) pp.183-97.

- 2) Ibid.
J. Marcus Fleming, "On Exchange Rate Unification", Economic Journal, Vol. 81, September 1971, pp.467-88.

- 3) Ronald I. McKinnon, Money in International Exchange, (Oxford : Oxford University Press, 1979), pp.163-175.

- 4) J.C. Ingram, "Some Implications of Puerto Rican Experience", Regional Payments Mechanism : The Case of Puerto Rico, (University of North Carolina Press, 1962), pp.113-33.

- 5) J. Marcus Fleming, "Domestic Financial Policies Under Fixed and Under Floating Exchange Rates", I.M.F. Staff Papers, Vol. 9, No. 3, November 1962, pp.369-79.

- 6) Tibor Scitovsky, "Money and the Balance of Payments", (London : Unwin University Book, 1967), pp.137-9.

- 7) W. Fellner, "On Limited Exchange Rate Flexibility", in Maintaining and Restoring Balance in International Payments, eds. W. Fellner et al, (Princeton University Press, 1966), pp.111-22.

- 8) R. Triffin, "The Myth and Realities of the So-Called Gold Standard", The Evolution of the International Monetary System : Historical Reappraisal and Future Perspectives, (Princeton University Press, 1964), pp.2-20.

- 9) Ronald I. McKinnon, Money in International Exchange, op. cit., pp.266.

- 10) Ibid., pp.267-9.

- 11) R.A. Mundell, "The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability", I.M.F. Staff Papers, Vol. 9, March 1962, pp. 70-79.
and,
J. Marcus Fleming, op. cit.

- 12) J.J. Polak, "Monetary Analysis of Income Formation and Payments Problems", I.M.F. Staff Papers, Vol. 6, No. 1, November 1957, pp. 1-50.

- 13) Ronald I. McKinnon, Money in International Exchange, op. cit., pp.155-6.

- 14) Ibid., pp.108 and pp.143.

- 15) Ibid., pp.143, 163-175.

- 16) Ibid., pp.148.

- 17) Fritz Machlup, "The Alignment of Foreign Exchange Rates" (New

York : Praeger, 1972), pp.70.

- 18) Milton Friedman, "The Case for Flexible Exchange Rates" in Essays in Positive Economics (Chicago : University of Chicago Press, 1953), pp.175.

and,

H.G. Johnson, "The Case for Flexible Exchange Rates, 1969" in Further Essays in Monetary Economics (London : Allen and Unwin, 1972), pp.198-228.

and,

Egon Sohmen, "Flexible Exchange Rates" (Chicago : Chicago University Press, 1961).

- 19) Ronald I. McKinnon, Money in International Exchange, op. cit., pp.155-62.

- 20) Ibid., pp.156.

- 21) Andrew D. Crockett and Saleh M. Nsouli, "Exchange Rate Policies for Developing Countries" in Finance in Developing Countries, ed. P.C.I. Ayre, (London : Frank Cass and Co. 1977), pp. 125-43.

- 22) Ibid., pp.139-40.

- 23) Ronald I. McKinnon, Money in International Exchange, op. cit., pp.108 and 143.

- 24) Ibid., pp.94-113.

- 25) In addition to Crockett and Nsouli references on independent

floating in developing economies include:-

Stanley W. Black, "Exchange Policies for Less Developed Countries in a World of Floating Rates", Princeton Essays in international finance 119 (Princeton 1976).

Leslie Lipschitz, "Exchange Rate Policies for Developing Countries : , Some Simple Arguments for Intervention", I.M.F Staff Papers, September 1978, pp. 650-675.

Graham Bird, "The Choice of an Exchange Rate Regime in Developing Countries", Philippine Economic Journal, 2, 1979, 148-161.

- 26) Crockett and Nsouli, op. cit., pp.128-130.
- 27) Michael Connolly, The Choice of an Optimum Currency Peg for a Small Open Country, Department of Economics Working Paper (Columbia South Carolina : University of South Carolina, 1980)
- 28) William H. Branson and Louka T. Katseli-Papaefstratiou, "Income Stability, Terms of Trade, and the Choice of an Exchange Rate Regime", Journal of Development Economics, 7, March 1980, pp. 49-69.
- 29) Leslie Lipschitz, "Exchange Rate Policy for a Small Developing Country, and the Selection of the Appropriate Standard", I.M.F Staff Papers, September 1979, pp. 423-449.
- 30) John Williamson, "A Survey of the Literature on the Optimal Peg", Journal of Development Economics, 11, March 1982, pp.39-61.
- 31) June M. Flanders and Elhanan Helpman, "An Optimal Exchange Rate Peg in a World of General Floating", Review of Economic Studies,

July 1979, pp. 533-542.

- 32) John Williamson, op. cit.
- 33) Michael Connolly, op. cit.
- 34) June M. Flanders and Elhanan Helpman, op. cit.
- 35) Stanley Black, op. cit.
- 36) Crockett and Nsouli, op. cit.
- 37) Leslie Lipschitz, op. cit.
- 38) Edmar L. Bacha, "The Impact of the Float in LDCs : Latin American Experience in the 1970s", in Exchange Rate Rules", ed. John Williamson, (London : Macmillan, 1981).
- 39) Leslie Lipschitz and V. Sundararajan, "The Optimal Basket in a World of Generalized Floating", I.M.F. Staff Papers, March 1980, pp. 80-100.
- 40) John Williamson, op. cit.
- 41) Ronald I. McKinnon, "Optimum Currency Areas" American Economic Review", Vol. 53, September 1963, pp.717-25.
- 42) Crockett and Nsouli, "Exchange Rate Policies for Developing Countries", op. cit., pp.141.

- 43) John Williamson, op. cit.
- 44) Ibid.
- 45) Khouja and Sadler, The Economy of Kuwait : Development and Role in International Finance, (London : Macmillan, 1979), pp. 182.
- 46) Central Bank of Kuwait, Economic Report for 1977.
- 47) Ibid.
- 48) M.W. Khouja and P.G. Sadler, op. cit., pp. 183.
- 49) International Bank for Reconstruction and Development (I.B.R.D.), The Economic Development of Kuwait (Baltimore : John Hopkins Press 1965), pp.1-4.
- 50) See Chapter 4, pp. 262.
- 51) See Chapter 2, pp. 75.
- 52) See Chapter 3, pp. 161-166.
- 53) Marc A. Miles, "Currency Substitution, Flexible Exchange Rates and Monetary Independence", American Economic Review, June 1978, Vol. 68, No. 3, pp.428-436.
- 54) Deena R. Khatkhate, "Evolving Open Market Operations in a Developing Economy : The Taiwan Experience" in Finance in Developing Countries, P.C.I. Ayre (ed.), pp.92-101.

BIBLIOGRAPHY

Abu Hakima, A.M. History of Eastern Arabia, (Beirut : Khayats, 1965).

Al-Bashir, F., A Structural Econometric Model of the Saudi-Arabian Economy 1960-70, (New York : John Wiley, 1977).

Al-Nafisi, Abdulla, Kuwait : Another View, (London : Private Press, 1978) (in Arabic).

Al-Saadoun, Jassim, "Factors Affecting the Distribution of Income in Kuwait", Journal of Gulf and Arab Peninsular Studies, 1979 (in Arabic), pp. 60-93.

Amin, Abdul Amir, British Interests in the Persian Gulf, (Leiden, The Netherlands : E.J. Brill, 1967).

Bacha, Edmar L., "The Impact of the Float in LDCs : Latin American Experience in the 1970s", in Exchange Rate Rules, ed. John Williamson (London : Macmillan, 1981).

Bailey, M.J., "The Welfare Cost of Inflationary Finance", Journal of Political Economy, April 1956, pp. 93-110.

Barbour, Sir David, The Standard of Value, (London : Macmillan, 1912).

Batchelor, R.A. and Griffiths, B., "Monetary Restraint through Credit Control : the Case of the United Kingdom", in Competition and Regulation in Financial Markets, ed. A. Verheirstraeten, (London : Macmillan 1981).

Betz, George, "A Note on the Money Supply in Singapore, 1957-1966", Malayan Economic Review, Vol. 12, No. 2, October 1967, pp. 116-121.

Bhattachareyya, A Concise History of the Indian Economy, (Calcutta : Progressive Publishers, 1972).

Bird, Graham, "The Choice of an Exchange Rate Regime in Developing Countries", Philippine Economic Journal, No. 2, 1979, pp. 148-61.

Black, Stanley W., "Exchange Policies for Less Developed Countries in a World of Floating Rates", Princeton Essays in International Finance 119 (Princeton 1976).

Branson, William H., and Katseli-Papaefstratiou, Louha T., "Income Stability, Terms of Trade, and the Choice of an Exchange Rate Regime", Journal of Development Economics", 7, March 1980, pp. 49-69.

Brunner, K., "A Scheme for the Supply Theory of Money", International Economic Review, January 1961, pp. 79-109.

Cagan, Philip, Determinants and Effects of Changes in the Stock of Money 1975-1960, National Bureau of Economic Research (New York : Columbia University Press, 1965).

Central Bank of Kuwait, Economic Report, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981.

Charnes, A., and Thore, S., "Planning for Liquidity in Financial Institutions : the Chance-Constrained Method", Journal of Finance,

December 1966, pp. 649-74.

Cochrane D., and Orcutt G.H., "Application of Least Squares Regressions to Relationships Containing Autocorrelated Error Terms", Journal of the American Statistical Association, Vol. 44, 1949, pp. 32-61.

Connolly, Michael, The Choice of an Optimum Currency Peg for a Small Open Country, Department of Economics Working Paper, (Columbia, South Carolina : University of South Carolina, 1980).

Corden, W. Max, Monetary Integration, Essays in International Finance, No. 93 (Princeton University Press, 1972).

Cramp, A.B., Monetary Management : Principles and Practice, (London : George Allen and Unwin, 1971).

Crockett, Andrew D., and Nsouli, Saleh M., "Exchange Rate Policies for Developing Countries", in Finance in Developing Countries, ed. P.C.I. Ayre, (London : Frank Cass and Co. 1977).

Crockett, A.D., and Evans, O.J., "Demand for Money in the Middle Eastern Countries", I.M.F. Fund Staff Papers, December 1980, pp. 543-577.

Dornbush, Rudiger, Open Economy Macro-Economics, (New York: Basic Book Publishers 1980).

Drake, P.J., Financial Development in Malaya and Singapore, (Canberra : Australian National University Press, 1969).

Drake, P.J., "Securities Markets in Less-Developed Countries" in Finance

in Developing Countries, ed P.C.I. Ayre, (London Frank Cass and Co. 1977).

Drake, P.J., Money, Finance and Development, (Oxford : Martin Robertson, 1980).

Edgeworth, F.Y., "The Mathematical Theory of Banking", Journal of the Royal Statistical Society, March 1888, pp. 113-127.

Edo, M.E., "Currency Arrangements and Banking Legislation in the Arabian Peninsula", I.M.F. Staff Papers, Vol. 22, No. 2, July 1975, pp. 510-538.

Fellner, W., "On Limited Exchange Rate Flexibility", Maintaining and Restoring Balance in International Payments, ed. W. Fellner et al, (Princeton University Press, 1966).

Flanders, June M., and Helpman, Elhanan, "An Optimal Exchange Rate Peg in a World of General Floating", Review of Economic Studies, July, 1979, pp. 533-542.

Fleming, J. Marcus, "Domestic Financial Policies Under Fixed and Under Floating Exchange Rates", I.M.F. Staff Papers, Vol. 9, No. 3, November 1962, pp. 369-79.

Fleming, J. Marcus, "On Exchange Rate Unification", Economic Journal, Vo. 81, September 1971, pp. 467-88.

Friedman, Milton, "The Case for Flexible Exchange Rates" in Essays in Positive Economics, (Chicago : University of Chicago Press, 1953).

Friedman, Milton, and Schwartz, Anna Jacobson, A Monetary History of the United States 1879-1960, National Bureau of Economic Research (Princeton : Princeton University Press, 1963).

Friedman, Milton, "Government Revenue from Inflation", Journal of Political Economy, July/August 1971, pp. 846-856.

Gandhi, D.K., Saunders, A., Woodward, R.S., The Kuwait Stock Market, (Calgary : University of Calgary Working Papers, Unpublished, 1978).

Ghatak, Subrata, Monetary Economics in Developing Countries, (London: Macmillan, 1981).

Goodhart, C.A.E, Money, Information and Uncertainty (London : Macmillan 1975

Great Britain and the Near East, Magazine, August 21st, 1943.

Great Britain and the Near East, Magazine, August 21st, 1947.

Griffiths, Brian, "Base Control : The Next Steps", in The City University Annual Monetary Review, No. 2, December 1980, pp. 35-45.

Grove and Exeter, "The Philippines Central Bank Act", Federal Reserve Bulletin, September 1948, pp. 938-949.

Gurley, J.G., and Shaw, E.S., "Financial Intermediaries and the Saving Investment Process", Journal of Finance, Vol. 11, No. 7, May 1956, pp. 257-276.

Gurley, J.G., and Shaw, E.S., Money in a Theory of Finance, (Washington : The Brookings Institution, 1960).

Hampt, Ottoman, Arbitrages et Parites, (Paris : Librairie Truchy, 1894).

Harberger, Arnold C., "A Pointer on Inflation", Journal of Money Credit and Banking, Vol. X, No. 4, November 1978, pp. 505-21.

Harberger, Arnold C., "Reflection on the Monetary System of Panama" in Chicago Essays in Economic Development, ed. D. Wall (Chicago : Chicago University Press, 1977), pp. 158-173.

Harberler, Gottfried, "The International Monetary System : Some Recent Developments and Discussions", in Approaches to Greater Flexibility of Exchange Rates, ed. George N. Halm (Princeton University Press, 1970).

Hazelwood, Arthur, "The Economics of Colonial Monetary Arrangements", Social and Economic Studies, December, 1954, pp. 291-315.

Hewins, R., A Golden Dream, (London : W.H. Allen and Company, 1963).

Hildreth, C., and Lu, J.Y., "Demand Relations with Autocorrelated Disturbances", Michigan State University Agricultural Experiment Station. Technical Bulletin 276, November 1960, pp. 3-76.

Ingram, J.C., "Some Implications of Puerto Rican Experience", Regional Payments Mechanism : The Case of Puerto Rico, (University of North Carolina Press, 1962).

International Bank for Reconstruction and Development, Missions Report,

The Economy of Kuwait, (Baltimore : John Hopkins Press 1964).

International Bank for Reconstruction and Development, The Economic Development of Kuwait, (Baltimore : John Hopkins Press, 1965).

Issawi, Charles, ed. The Economic History of Iran, (Chicago : Chicago University Press, 1971).

Izzard, Molly, The Gulf, (London : John Murray, 1979).

Johnson, H.G , "The Objectives of Economic Policy and the Mix of Fiscal and Monetary Policy under Fixed Exchange Rates", in Maintaining and Restoring Balance in International Payments, eds. W. Fellner et al, (Princeton : Princeton University Press, 1966).

Johnson, H.G., "A Survey of Theories of Inflation", Essays in Monetary Economics, (London : George Allen and Unwin, 1967).

Johnson, H.G., "The Case for Flexible Exchange Rates, 1969", in Further Essays in Monetary Economics, (London : George Allen and Unwin, 1972).

Johnson, H.G., "Seigniorage and the Social Saving from Substituting Credit for Commodity Money", in Further Essays in Monetary Economics, H.G. Johnson (London : George Allen and Unwin, 1972), pp. 263-70.

Kenen, Peter B., "The Theory of Optimum Currency Areas : An Eclectic View", in Monetary Problems of the International Economy, ed. Robert A. Mundell and A.K. Swoboda (University of Chicago Press, 1969).

Khatkhate, D.R., "Analytic Basis of the Working of Monetary Policy in

Less Developed Countries", I.M.F. Staff Papers, Vol. 19, No. 3, November 1972, pp. 533-558.

Khatkhate, D.R., "Evolving Open Market Operations in a Developing Economy : The Taiwan Experience", in Finance in Developing Countries, ed. P.C.I. Ayre, (London : Frank Cass, 1977).

Khouja, M.W., and Sadler, P.G., The Economy of Kuwait : Development and Role in International Finance, (London : Macmillan, 1979).

King, J.R., Stabilisation Policy in an African Setting : Kenya 1963-73, (London : Heinemann 1979).

Lipschitz, Leslie, "Exchange Rate Policies for Developing Countries : Some Simple Arguments for Intervention", I.M.F. Staff Papers, September 1978, pp. 650-675.

Lipschitz, Leslie, "Exchange Rate Policy for a Small Developing Country, and the Selection of the Appropriate Standard", I.M.F. Staff Papers, September 1979, pp. 423-449.

Lipschitz, Leslie, and Sundararajan, V., "The Optimal Baskets in a World of Generalized Floating", I.M.F. Staff Papers, March 1980, pp. 80-100.

Lorrimer, J.G., Gazeteer of the Persian Gulf, Oman and Central Arabia (Calcutta : 1908-15, Republished by Gegg International, Westmead, U.K), Vol. II.

Machlup, Fritz, The Alignment of Foreign Exchange Rates, (New York : Praeger, 1972).

Mackenzie, Compton, Realms of Silver, (London : Routledge and Kegan Paul, 1954).

Malone, J.J. "Involvement and Change : The Coming of the Oil Age to Saudi Arabia", in Social and Economic Development in the Arab Gulf, ed. Tim Nibloch (London : Croom Helm, 1980).

Markowitz, H.M., Portfolio Selection : Efficient Diversification of Investments, Cowles Foundation Monograph No. 16, (New York : Wiley 1959).

Maynard, Geoffrey, "The Economic Irrelevance of Monetary Independence : The Case of Liberia", Journal of Development Studies, Vol. 6, January 1970, pp. 111-132.

McKinnon, Ronald I., "Optimum Currency Areas", American Economic Review, Vol. 53, September 1963, pp. 717-25.

McKinnon, R.I., Money and Capital in Economic Development, (Washington : The Brookings Institution, 1973).

McKinnon, R.I., Money in International Exchange, (Oxford University Press, 1979).

Meltzer, Allan H., "Central Bank Policy : Some First Principles", in The City University Annual Monetary Review, No. 2, December 1980, pp. 27-33.

Miles, Marc A., "Currency Substitution, Flexible Exchange Rates and Monetary Independence", American Economic Review, Vo. 68, No. 3, June

1978, pp. 428-436.

Moore, Alan, "Onshore and Offshore Banking in Bahrain", in Arab Financial Markets, eds. Peter Field and Alan Moore, (London : Euromoney Publications, 1981).

Morgan E. Victor, A History of Money, (London : C. Nicholls and Co. Ltd., 1965).

Morrison, G.R., Liquidity Preferences of Commercial Banks, (Chicago : University of Chicago Press, 1966).

Mundell, Robert A., "A Theory of Optimum Currency Areas", American Economic Review, Vol. 51, September 1961, pp. 657-65.

Mundell, Robert A., "The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability", I.M.F. Staff Papers, Vol. 9, March 1962, pp. 70-79.

Mundell, R.A., "Growth, Stability and Inflationary Finance", in Journal of Political Economy, April 1965, pp. 97-109.

Najjar, I., The Development of a One Resource Economy : A Case Study of Kuwait, (Indiana University : Unpublished Thesis, 1969).

Naval Intelligence Division, H.M. Navy, Iraq and the Persian Gulf, (London : HMSO, 1944).

Newlyn, W.T., "Financial Interrelationships", in The Financing of Economic Development, ed. W.T. Newlyn, (Oxford : Clarendon Press, 1977).

Newlyn, W.T., "Intermediation and Credit Creation", in The Financing of Economic Development, ed. W.T. Newlyn, (Oxford : Clarendon Press, 1977).

Orr, D., and Mellon, W.G., "Stochastic Reserves, Losses and Expansion of Bank Credit", American Economic Review, September 1961, pp. 614-23.

Polak, J.J., "Monetary Analysis of Income Formation and Payments Problems", I.M.F. Staff Papers, Vol. 6, No. 1, November 1957, pp. 1-50.

Polak, J.J. and Argy, J., "Credit Policy and the Balance of Payments", I.M.F. Staff Papers, Vol. 18, No. 1, March 1971, pp. 1-24.

Polak, J.J. and Boissonneault, Lorette, "Monetary Analysis of Income and Imports and Its Statistical Application", I.M.F. Staff Papers, Vol. 7, No. 3, April 1960, pp. 349-415.

Poole, W., "Commercial Bank Reserve Management in a Stochastic Model : Implications for Monetary Policy", Journal of Finance, December 1968, pp. 769-91.

Porter, R.C., "A Model of Bank Portfolio Selection", Yale Economic Essays, Fall 1961, pp. 323-59.

Rouall, J.O., "Banking Developments in Kuwait", Middle East Journal, Vol. 24, Winter 1970, pp. 87-90.

Rumaihi, Mohammed G., "The Mode of Production in the Arab Gulf before the Discovery of Oil", in Social and Economic Development in the Arab Gulf, ed. Tim Niblock, (London : Croom Helm, 1980).

Sayigh, Yusif A., The Determinants of Arab Economic Development, (London : Croom Helm 1978).

Scitovsky, Tibor, Money and the Balance of Payments, (London : Unwin University Book, 1967).

Shaw, E.S., Financial Deepening in Economic Development, (Oxford : Oxford University Press, 1973).

Short, B.K., Monetary Aspects of the Currency Board and Commercial Banks in Malaya and Singapore 1951-66, Mimeograph, School of Oriental and African Studies.

Sohmen, Egon, Flexible Exchange Rates, (Chicago : Chicago University Press, 1961).

Sohmen, Egon, "The Assignment Problem", in Monetary Problems of the International Economy, eds. R.A. Mundell and A.K. Swoboda, (Chicago : University of Chicago Press, 1969).

Stevens, R., The Arabs' Near Frontier, (London : Temple Smith, 1976).

Swan, T.W., "Longer Run Problems of the Balance of Payments" in The Australian Economy : A Volume of Readings, eds. H.W. Arndt and M. Corden, (Melbourne : Cheshire Press, 1955).

Thirlwall, A.P., Inflation, Saving and Growth in Developing Economies, (London : Macmillan 1974).

Thorp, Rosemary, "Inflation and the Financing of Economic Development", in Latin America in the International Economy. Proceedings of a Conference of the International Economic Association in Mexico City, Mexico (1971), eds., V.L. Urquidi and R. Thorp, (London : Macmillan 1973).

Tobin, J. "Liquidity Preference as Behaviour Towards Risk", Review of Economic Studies, February 1958, pp. 65-80.

Triffin, R., "The Myth and Realities of the So-Called Gold Standard", The Evolution of the International Monetary System : Historical Reappraisal and Future Perspectives, (Princeton University Press, 1964).

Williamson, John, "A Survey of the Literature on the Optimal Peg", Journal of Development Economics, No. 11, March 1982, pp. 39-61.

Wilson, A.T., The Persian Gulf : An Historical Sketch from the Earliest Times to the Beginning of the 20th Century, (Oxford : Clarendon Press, 1928).

Wilson, R.A., "The Determinants of Commercial Bank Deposits and Lending in the Gulf", The Arab Gulf Journal, Vo. 2, No. 2, October 1982, pp. 77-92.

Wong, K.P., "A Monetary Model of Singapore's Monetary Sector", Malayan Economic Review, Vo. 19, No. 1, April 1974, pp. 46-63.