

**THE SPECIAL DRAWING RIGHTS -  
A SURVEY OF SOME ASPECTS**

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## CHAPTER I

### INTRODUCTION

When we deal with international payments and adjustments, we normally take into consideration the existence as well as significance of some form of international money to facilitate the operations taking place primarily in various international transactions. Here a brief discussion of international money, international liquidity and international reserves has been done. The focus then shifts to a discussion of demand for and supply of reserves. In the last section the purpose of our study and the organisation of various chapters is outlined.

#### 1.1 International Liquidity, International Reserves and International Money

By international liquidity we mean stock of internationally acceptable monies available for settlement of payments between individuals, corporate bodies of trading nations, which can take various forms; the qualifications for use being that they be liquid, easily transferable, readily acceptable and have a stable and predictable value. Generally speaking, international monies, which provide the source for international liquidity can take any of the three forms viz., commodity money, fiat money and credit money. Gold is the prime example of commodity money which with the expansion of

world trade and due to its limited supply have been restricted in use. The fiat money, in its pure form has been backed by something having an intrinsic value which has come into popularity after the Second World War - the dollar before the 1971 devaluation being the most appropriate example. Increasing sophistication, confidence in the system results in an increasing dependence on credit money which has off-late become quite fashionable in international monetary system.

International money is required to facilitate the international exchange, in the same way as a medium of exchange is required in the domestic economy. But 'international reserves' are normally held in order to finance trade imbalances and not trade itself where the precautionary motives are stronger. The reserves are held so that any unanticipated imbalances in international payments can be made easily avoiding costly adjustment measures.

## 1.2 Demand for International Reserves

This leads us to the discussion of demand for reserves. Following Milner and Greenway (1979), we argue that in a regime of perfectly functioning freely floating exchange rates, there is no need for central banks to hold stocks of international reserves (unless for purely political motives). Under such a system, exchange rate automatically equilibrates demand and supply in foreign exchange markets, thereby

balancing the nation's payments and receipts. But under the system of pegged rates, the country's par value is constrained by agreed support limits and country's central bank intervene in the foreign exchange markets to maintain the value of the currency within these limits; i.e. during a balance of payment surplus, currency appreciation is avoided through foreign exchange accumulation and through decumulation of stock of reserves, exchange rate depreciation is avoided.

Ceteris Paribus, exchange-rate flexibility has an important impact on global reserve requirement, the higher the index of flexibility, the lower are global reserve requirement. This question brings us to a related factor influencing world reserve requirement i.e. the ability and willingness of countries to engage themselves in 'necessary' adjustments. When the exchange rates are fixed or pegged, the main burden of adjustment is supposed to fall on domestic price and income depending on their degrees of willingness, which means the less willing they are, the greater will be the potential requirement. Again, consideration of time taken for adjustment reveals that the longer the time period the deficit countries take in adopting any adjustment policy, the greater is their demand for reserves. And, if at the same time, the surplus countries hesitate to eliminate or reduce their surplus, then a proportion of world reserves gets immobilised. Under these circumstances, the deficit

countries bear a disproportionate share of the adjustment burden, whereas the surplus countries generally avoid to inflate their domestic economies in the process of eliminating their surpluses, which create a continuous increase in demand to finance the increasing imbalances. Ceteris paribus, the more willing are the countries to participate in the adjustment process, the less will be the global demand for reserves. But, when countries are less willing to make domestic adjustment, there will be increasing rigidity in the adjustment system and demand for reserves increases. To overcome such a situation, consultation and cooperation among countries become necessary and for having a controlled liquidity growth the function of any international agency which can manage such a situation becomes evident. This analysis has a direct bearing and further consideration during the last decade of Brettonwoods era having implication for the creation of Special Drawing Rights (SDRs).

Besides global reserve for demand, from a country's point of view also there exists demand for international reserves, where the size of the nation's foreign trade sector becomes an important determinant. The greater the size of its foreign trade sector, the more significant the impact of any random disturbance, and therefore more stock of reserves is required. But to hold a stock of international reserves

means tying up resources in low-yielding assets when they can be (socially) more profitable elsewhere, in either consumption or in investment. Thus other things being equal, the greater the opportunity cost involved in holding reserves the lower the stock of reserves held. Other important factors which are normally taken into consideration are costs involved in taking adjustment measures, speed at which adjustments take place, the degree of correlation between the supply and demand of reserve fluctuations (Clark (1970), Grubel (1971)).

### 1.3 Sources of Supply of International Reserves

After having discussed the factors which affect the demand for reserves, we focus our attention on the sources of reserves which is known as supply of reserves. The main sources of international reserves are central bank gold holdings, convertible foreign currencies, IMF drawing rights and SDRs; other sources. A brief discussion of the first three sources can make our choice of the SDR for the purpose of study clearer.

Gold has served as an international reserves for decades together. It has been used as a medium of exchange in both the domestic as well as international economy. Following the demise of Gold standard, the role of gold as an international reserves has been declining primarily because of

limited supply of gold as well as increase in the non-monetary functions of gold. With a persistence decline in the share of gold in international reserves, the supply of convertible currencies have steadily increased in the international monetary system. The convertible currencies are less costly to produce, more convenient to hold for international payment adjustment purposes; easier to acquire and yield income in the form of interest payments. With convertible currency as reserves, the system primarily relies on the key currency country running balance of payment deficits. But, today the process of acquiring these currencies have changed because of the growth of private capital markets.

As far as IMF drawing rights are concerned, all members are assigned a quota which provides the basis for voting rights as well as drawing rights. The member pays a subscription to the Fund equal to the value of the quota, 25 per cent being paid in gold and 75 per cent in the country's own currency. The Fund acquires stocks of currencies from its members which it subsequently lends to the nation facing balance of payment difficulties. Any country facing payments difficulties can borrow an amount of foreign currency from the Fund up to the value of currency component of its quota and the loan as well as service charges are repaid over a specified time period. These are country's drawing rights. Though use of Fund positions forms relatively a small



percentage of total reserves, yet they can be automatically activated whenever a country feels itself to be under payments pressure and hence their importance cannot be neglected. In addition to these automatic drawing rights, any member country can further draw on its credit tranche, buffer stock facility, oil fund facility etc., which are generally conditional and degree of stringency increases with successive drawings. Because of the conditionality element, these are not usually included in calculation of a country's international reserves.

#### 1.4 Purpose of Study and Chapter Scheme

Now, the question is, given already three sources of reserves from which supply stem from, why there is the requirement for the fourth source viz. SDRs. The answer lies in the examination of the period during which it has been conceived, when many countries have been feeling to diminish the role of gold from the system and have been putting emphasis on reducing the role of the key currencies as well. That obviously puts more pressure on IMF drawing rights, but because of limited resources of the Fund, the Fund may not be able to generate adequate reserves. So, on the basis of mutual trust and in anticipation of healthy international cooperation, a new form of reserves has been conceived having some unique features. This asset has been conceived

to eventually replace all other forms of reserves, primarily reducing the role of gold and substituting a major portion of foreign exchange reserves and emerge as the principal reserve asset of the system, smoothening the functioning of the international payments and adjustments. The purpose of this survey is to look into this matter carefully by examining what the new reserve is, various mechanisms and issues associated with it, and how far it has become successful in fulfilling the conceived objectives.

For the analysis, the dissertation has been subsequently divided into four chapters. The second chapter focuses on the issues leading to the emergence of SDRs, where the need for this reserve asset becomes imminent. The unique features of this asset has been discussed through the discussion of various mechanisms associated with it in the third chapter. The fourth chapter discusses few important issues with regard to the SDRs focusing on their importance as well as discussing some policy considerations. The evaluation of the performance of SDRs as a reserve asset is the subject matter of the fifth chapter. Last chapter provides the summary of all the chapters and concludes on the basis of the survey about how far SDRs have become successful in attaining the goal which has quite often been quoted in the Fund's literature with regard to SDRs as to make it the principal reserve asset.

## CHAPTER II

### THE EVENTS LEADING TO THE EMERGENCE OF SPECIAL DRAWING RIGHTS

This chapter deals with issues which are considered to be the shortcomings of the gold exchange standard motivating the creation of SDRs. These shortcomings are (i) insufficient liquidity, (ii) failing confidence in the convertibility of the principal reserve asset, and (iii) asymmetries in reserve creation. After discussing these, various plans motivating the creation of SDRs have been stated, and the main events leading to its emergence have been outlined.

#### 2.1 Insufficient Liquidity

One of the major shortcomings of the reserve system after the Second World War has been its inability to ensure adequate growth of international liquidity.

##### 2.1.1 Analysis of Level and Composition of International Reserves 1948-1969

For the purpose of analysis, we first refer to Table 2.1. From the table it is clear that at the end of 1969, gold is still the major component of reserves. Out of total international reserves, gold, foreign exchange, fund positions amount approximately 50 per cent, 42 per cent, 8 to 9 per cent respectively. Secondly, the increase in the reserve

**Table 2.1 : Post-war level and composition of international reserves 1948-1969**

Year	Total reserves (SDR billion)	Gold (SDR billion)	Fund Posi- tion (SDR billion)	Foreign exchanges (SDR billion)
1948	49.5	34.5	1.6	13.4
1950	50.3	35.3	1.7	13.3
1952	51.8	36.9	1.8	14.2
1954	55.4	38.1	1.8	16.7
1956	58.2	38.0	2.3	17.8
1958	57.6	38.0	2.6	17.0
1960	60.2	39.3	3.6	18.6
1962	63.1	40.8	3.9	19.9
1964	69.9	40.9	5.4	23.7
1966	72.6	40.9	6.3	24.4
1967	74.3	39.5	5.7	29.0
1968	77.4	38.9	6.5	32.0
1969	78.2	39.1	6.7	32.4

**Notes** : 1. Figures are for end years  
 2. Totals may not add precisely due to rounding  
 3. SDR 1 = \$1.00

**Source** : Milner and Greenway (1979), p. 204.

components are not identical. The fastest growing component is the foreign exchange which provides around three-fourth of increase in total reserve between the period 1960 to 1969. Reserve positions with Fund is fluctuating around a slowly rising trend. Gold reserve is not changing significantly. But these reserve components are not able to respond flexibly to increase in the demand for reserve, which in the literature has been treated as insufficient liquidity/inadequate reserves.

#### 2.1.2 Causes of the Behaviour Pattern

Gold supply is limited by the condition of production and rise of production cost to the fixed price of gold. The supply of the reserve by the Fund is a by-product of the Fund credit and is not able to respond fully to the growing world demand. The foreign exchange reserves which is growing consist mostly of claims on the U.S. treasury. This is also limited by the size of Balance of Payments deficits of the U.S. "To be sure, these deficits could, up to a point, respond to an increase in the demand for foreign exchange reserves in the world economy: they could be increased through the effects of devaluation of currencies against the U.S. dollar and through official borrowing in the U.S. capital market." (IMF (1987a), p.4). But under the gold exchange standard, given restraint on the exchange rate action under 'par value system' and small volume of the U.S. bank lending

to monetary authorities abroad, the growth of this component of reserves is also limited. Because of the limits to responsiveness of the supply of reserves, given fixed price of gold in terms of U.S. dollar - the gold exchange standard is perceived as having a deflationary bias.

### 2.1.3 Views of Authors

Views of many authors also seem to confirm the expected inadequacy of reserve growth. Triffin (1960) takes reserve to import as a measure of adequacy and examines the projected behaviour of this ratio as well as ratio of monetary gold to import for the period 1958-67 and finds a perspective gold/reserve shortage. The potential shortage according to him will have to be made up either by accumulation of convertible currencies (primarily U.S. dollar) or by deflation. Machlup and Malkeil (1964) also agree that the existing system of liquidity position is inadequate by taking variability of exports effecting reserve demand. To facilitate smoother adjustment an increase in reserve is considered to be desirable by Harrod (1965). The measurement of reserve adequacy has been further modified by authors like Kenen and Yudin (1965), Kelly (1970), Flanders (1973), Clark (1970), who use variability measures in their study of reserve adequacy. Brown (1964) uses ratios of reserves to net external balance in his analysis. Most of them reach the consensus of inadequacy of reserve for the growing liquidity needs of the world.

Grubel (1971), points out that the various ratio analysis lack any rigorous basis in theory and claims primarily that the adequacy of any level of reserve depend on monetary, fiscal and exchange rate policies pursued by various countries. Clower and Lipsey (1968) note that the capital account plays an important role in payment imbalances and the measures of adequacy based on trade data are insufficient and a proper understanding of economics and psychology of speculative crises is also required.

However, reserve to import ratio remains the most popular method of analysis. (Machlup (1965), Heller (1968) IMF (1970b).)

#### 2.1.4 Overall Evidence

A declining ratio of reserve to imports, an increasing number of restrictions on international transactions, and growing dependence on official credit arrangements have been viewed as symptoms of reserve shortage.

##### 2.1.4.1 Declining Ratio of Reserves to Imports

It is widely believed that the demand for reserves tend to grow with the value of imports - though not necessarily in the precise proportion to it. A study of Table 2.1.4 will throw some light on this matter.

Table 2.1.4 : Ratio of reserve to imports (percentage)  
1958-68 (For 60 countries)

Year	Industrial countries excluding the U.S.	U. S.	Other developed countries	LDCs	Total (60 countries)
1958	42.4	162.0	40.0	46.2	62.5
1959	43.9	129.5	40.8	43.7	58.9
1960	42.0	124.8	36.0	39.0	53.7
1961	45.0	119.2	37.6	36.8	53.7
1962	45.0	100.6	42.1	34.2	51.5
1963	42.9	90.6	42.8	34.8	48.7
1964	40.1	81.0	41.5	33.6	45.1
1965	39.3	66.0	35.8	34.5	42.3
1966	37.3	49.9	32.4	34.6	38.6
1967	35.6	40.2	31.3	35.3	36.6
1968	32.2	34.2	32.7	35.6	33.0

Source : IMF Annual Report, 1969, Table 5, p. 22.

Because of the unprecedented growth of world trade and payments during this period, the ratio of reserves to imports of all countries falls from 62.5 per cent in 1958 to 33.0 per cent in 1968. For the U.S. this ratio falls from 162.0 per cent to 34.2 per cent which to some extent



reflects the redistribution of reserves and indicates the declining trend of U.S. reserves.

#### 2.1.4.2 Increase of Number of Restrictions on International Transactions

After 1960s many policies are introduced to limit the growing volume of short term private capital movement. For example, in response to an outflow of capital, the U.S. introduces the Interest Equalisation Tax in 1963, which is designed to lower the after-tax returns accruing to the U.S. residents purchasing non-U.S. dollar-dominated foreign asset. (IMF (1987a), p.5.). Many countries apply or intensify measures to control capital flows giving evidence of shortage of international reserves.

#### 2.1.4.3 Growing Dependence on Official Credit Arrangements

During the sixties there is increased recourse to bilateral official credit arrangements. The decision of central banks of a group of industrial countries to provide reciprocal lines of credits in 1961 shows an increasing trend. The swap network grows from less than \$2 billion at the end of 1961 to almost \$20 billion at the end of 1968. The increase in Fund quota of 1959 and 1964, <sup>and</sup> the General Agreement to Borrow (GAB) in 1962 give some more indication.

All these arrangements, though provide reserves, are

not considered to be adequate substitute for the traditional sources. The spreading use of these arrangements also give evidence of an inadequate supply of reserves.

## 2.2 Failing Confidence in the Gold Convertibility of the Principal Reserve Currency

The gold exchange standard emerge in the period between the two world wars because of inadequate growth in the gold supply relative to the reserve needs of a growing world economy. Supply of gold is subject to rising cost of mining and physical availability. Under these circumstances, it is but natural to attempt to supplement gold by creating balances in a currency that can be converted into gold. These currencies come to be known as reserve currencies. After the Second World War, the U.S. dollar assumes the role of the reserve currency. Under the Bretton Woods system, there is simultaneous use of more than one form of reserve assets, giving rise to the possibility that the reserve holders may substitute one asset for the other.

### 2.2.1 Some Views and Evidence

The confidence problem is very well discussed in Triffin (1960). He argues that growing claims on the reserve centre's gold holding may raise doubts about the convertibility of these claims into gold. Once this point is reached, a large scale attempt to exchange dollars for gold will result in a collapse of the system.

Johnson (1967) argues that given the limited growth of gold reserves, and other countries accumulation of dollar through a U.S. balance-of-payment deficit, where U.S. is under no obligation to maintain a fixed relationship between its gold assets and dollar liabilities, her liquidity position worsens, '... thereby condemning the objective basis for confidence by the rest of the world in the unlimited convertibility of their dollars into gold'. (Johnson (1967), p.7).

The decline in the U.S. asset and liabilities ratios has been provided in Table 2.2, which reflect the worsening liquidity position, which is an indication of failing confidence on dollar convertibility.

At this juncture, the analysis of certain developments will reveal the detection of the problem.

First, to avoid the confidence crisis the U.S. tries to maintain a fixed gold price. To maintain a fixed gold price, the reserve centre has to sell gold in the private market to counter upward pressures on the prices at which private gold transactions are taking place. Through the establishment of Gold Pool in 1961, the U.S. with the help of few industrial countries tries to maintain the fixed price of gold through intervention in the London Gold Market, which is terminated and a two-tier gold market is established. But, suspension of gold rates in support of private market

Table 2.2 : U.S. ratio of reserves to liquid liabilities  
1950-68

Year	Reserve: liquid liabilities
1950	2.73
1952	2.38
1954	1.84
1956	1.59
1958	1.34
1960	0.92
1962	0.71
1964	0.58
1966	0.50
1968	0.41

Source : Compiled from various issues of International Financial Statistics.

price of gold, do not eliminate pressures on the U.S. gold stock. Given the strain on the U.S., she tries to overcome the problem through moral susion which cannot be sustained and towards the end of 1960s it becomes necessary for her to suspend the convertibility of official dollar holdings into gold.

Second, many argue that an increase in the dollar

price of gold will alleviate the liquidity problem by increasing the dollar value of total reserves, and confidence in convertibility will be strengthened by the fact that dollar value of the U.S. gold stock relative to the value of official claims on the U.S., will increase. But such an action would have involved great inequalities and encouraged speculative factors (IMF (1965), Machlup (1964)).

### 2.3 Assymetries in Reserve Creation

Besides the two problems discussed earlier, the reserve system of 1960s is also alleged to have assymetries in the distribution of benefits and costs of reserve currency countries.

First, the reserve-centre country mainly the U.S. is able to finance her deficit through issuing her liabilities. The authorities of other countries may have to acquire them to prevent the appreciation of their own currencies. But these countries have to settle their payment deficits by transferring assets. Under the gold exchange standard of 1950s and 1960s, the unrestricted convertibility of dollar balances held international reserves provided some discipline to the balance-of-payment policies. But once the convertibility problem arises, this mechanism shows certain weakness at least in maintenance of stability.

Second, it is pointed out that there are considerable

costs involved in fulfilling the function of a reserve centre. Some of which arise from a perceived loss of control over monetary policy. It is feared that a reserve centre may not always be able to sterilise the effects on domestic monetary aggregates of variations in the external demand for its currency. But it is difficult to identify in any given period the factors governing the growth in official claims on the U.S.

Third, the advantages of the U.S. also imply disadvantage for other countries - specially developing countries. The primary concern is the seigniorage benefits going to the reserve centre countries. Many developing countries raise their objection against this phenomenon.

#### 2.4 Plans for Reform

Triffin (1960) put-forwards a detailed proposal for reform of the international monetary system placing the Fund in a central role of creation and management of international liquidity. This plan is the modified version of Keynes's (1943) plan. Walshe (1971) has provided a detailed analysis of various plans. However, our analysis is restricted to few of these proposals.

##### 2.4.1 Keynes Plan

The Keynes plan involves the creation of deposits in

bancor, a new international currency unit, at the (proposed) International Clearing Union (ICU). This bancor will have a fixed price in terms of gold only changing when the price of gold will change. Currencies will not be permitted as part of reserves. Bancor deposits can be created or augmented by sales of gold to the ICU or by the use of overdraft privileges by deficit countries. The privilege will depend on the country's assigned quota. These quotas will be adjusted annually with changing foreign trade. Depending on the relationship between bancor balance and a country's quota, the overdraft and credit balances will be subject to changes. In addition to overdrafts, a deficit country can acquire Bancor in an active credit market for these claims. (For a detailed discussion refer Gardner (1956), Grubel (Ed.) (1963) pp. 55-79).

#### 2.4.2 Triffin Plan

Triffin plan, though primarily draws the ideas from Keynes plan, allows for a more detailed expansion of reserve assets through open market operations by an expanded international monetary fund. An upward limit on reserve creation of 3 to 5 per cent will be set. Initial (interest bearing) deposits will be created by sales of gold and foreign exchange to the Fund. An initial proportion (20 per cent of reserves) to be held in Fund balances will be established. This plan provides for both a controlled but steady growth in liquidity

and substitute for reserve currencies in central bank portfolios.

#### 2.4.3 Stamp Plan

Stamp (1958) suggests the creation of IMC certificates which will be accepted by central banks as payments from other central banks. These can be distributed to developing countries providing a link between reserve creation and development finance. As Machlup (1963) points out, these certificates will be much less saleable than the Fund investment as envisaged by Triffin, exposing the Fund to the risk of loss in its investment.

The proposals so far discussed put emphasis on the role of the IMF and intend to replace reserve currencies.

#### 2.4.4 Plans for Composite Reserve Units (CRUs)

Bernstein (1963, 1965) proposes the creation of CRUs by a limited group of key-currency countries through deposit of their currencies with the Fund. Participants will be obliged to accept CRUs up to a specified proportion of their gold stocks. This involves mutual assistance among the central banks of major industrial countries, with the Fund as a trustee.

The accent here clearly lies on the extension of world



reserves since these will be increased by the creation of CRUs. But behind the idea of CRU transferability is the intention to replace the dollar as reserve currency while the CRU will be controlled by the Group of Ten.

#### 2.4.5 Others

Roosa (1963) advances a plan for expanded swap network and establishment of multiple reserve currency system. There is also<sup>a</sup> proposal to go back to gold standard (Rueff, 1967, Morgan and Morgan 1977).

#### 2.5 The Birth of SDRs

However, no suggestion is concrete and suffer from overcoming all the three main problems discussed earlier. Therefore, the need for a new form of reserve asset is strongly felt. Henry H. Fowler, begins, from the second half of 1965 onwards, to defend the idea of a new international reserve currency on the condition that this will be created under the auspices of the IMF, that it shall be valid as a substitute for gold reserves and that all countries shall receive a share (Soloman (1977), pp. 89-95). As a result of this, during the annual meeting of IMF in September 1966, a Joint Commission has been set up composed of the Group of Deputies of the ten richest countries and all Executive Directors of the IMF. Taking up the idea of Soloman, this commission develops a scheme for Reserve

Drawing Rights, which is discussed and approved (with certain amendments) during the annual meeting of the IMF in September 1967 at Rio de Janeiro. Still more amendments are introduced after heated discussion in the Stockholm meeting of the Ministers of the Group of Ten in March 1968. Unanimous agreement is impossible as the French and the American viewpoints seem irreconcilable - the former putting more emphasis on the CRU proposal. The Rio scheme of 1967 undergoes a number of important changes due to European pressure and the term 'Reserve Drawing Rights' is replaced with that of 'Special Drawing Rights' (SDRs). (For legal issues refer Gold (1971)). By July 28, 1969, IMF, in addition to the management of the General Account, is also entrusted with a new Special Drawing Account, with the birth of a new reserve currency.

## CHAPTER III

### SPECIAL DRAWING RIGHTS: MECHANISMS

After having discussed the way SDRs have emerged, it will be essential to discuss what they are and various mechanisms associated with it like allocation, uses, interest rate, valuation, etc. Here most of the mechanisms have just been explained without going into the associated issues. The issues are dealt with in subsequent chapters.

#### 3.1 Nature

At the outset, one thing should be clear that SDRs are not tangible money (i.e. there does not exist any SDR note or coin). They can be defined as a limited competence by one country to acquire an international means of payment from a third country. They are book entries included in the reserves of member countries alongside gold, reserve currencies, and IMF tranche positions (Ndegwa (1979), p.3.). As far as official SDRs are concerned, after the allocation of SDRs, IMF opens an SDR account for that country. When a member country utilises the facility, the account is debited to the extent utilised, otherwise it is credited.

These drawing rights are 'special' in the sense that they are created by the mutual agreement of Fund members and

are not conditional like other drawing facilities of the Fund. They are created through allocation mechanism.

### 3.2 Allocation

According to Article XV, Section 1 (IMF 1976), the Fund is authorised to allocate SDRs to members that are participants in the SDR department to meet the need, as and when it arises, for a supplement to existing reserve asset. (For clarification of legal issues see Gold (1971), p. 11). In deciding on the timing and allocation the Fund takes into consideration of this Article. It takes into consideration the Fund's Articles of Agreement, which call upon the Fund members to collaborate with each other and with the Fund with a view to making it Principal Reserve Asset of the international monetary system (IMF (1986), p. 263). Over the years, the Fund has been trying to make it the Principal Reserve Asset.

Decision to allocate SDRs are made by the Board of Governors, on the basis of a proposal by Managing Director, concurred in by the Executive Board, and require an 85 per cent majority of the Fund's voting power. Even the decision on cancellation are governed by the same principles that apply to allocations and are made for basic periods. (Article XVIII, Sections 1 and 2, IMF (1976), p. 324; IMF (1987a), p.56.)

Through periodic allocations, unconditional liquidity is created for the participants in the SDR department (at present all members are the participants in the SDR department). The allocation is decided in proportion to the member countries quota at the time of allocation. Each participant is under an obligation to accept thrice the cumulative total of SDRs allocated to it. A member country may be required to hold in all 300 per cent of the cumulative allocations of SDRs made to it by the Fund i.e. 100 per cent representing allocations made by the Fund and 200 per cent to be received from others. So, 300 per cent is the minimum statutory obligation. But a member is free to hold SDRs above this limit. (See Article XVIII, Sections 1 to 4, IMF (1976), pp. 324-327; IMF (1986), p. 269.)

The amount and timing of SDR allocations are shown in Table 3.2. There has not been any fresh allocation since 1981. At its meeting in April 1986, the Interim Committee has discussed the question of further SDR allocations and has determined that although most members have favoured an allocation, the broad support needed for an allocation has been lacking (IMF (1986), p. 268).

### 3.3 Valuation

The SDR which has been created in 1969 as a means of supplementing the quantity of official reserves, is equivalent

Table 3.2 : SDR allocations, 1970-85

(in billion of SDRs)			
Year	Basic period	SDR allocation	Net cumulative allocation
1970	First	3.4	3.4
1971	First	3.0	6.4
1972	First	3.0	9.4
1973	Second	-	9.4
1974	Second	-	9.4
1975	Second	-	9.4
1976	Second	-	9.4
1977	Second	-	9.4
1978	Third	-	-
1979	Third	4.0	13.4
1980	Third	4.0	17.4
1981	Third	4.0	21.4
1982	Fourth	-	21.4
1983	Fourth	-	21.4
1984	Fourth	-	21.4
1985	Fourth	-	21.4

Source : IMF (1987a), p. 57.

to 0.888671 grams of fine gold, which is also the value of one U.S. dollar before 1971. The SDRs one-to-one correspondence to the U.S. dollar lasts for only about two and half years.

The devaluation of the dollar decided in December 1971 at the Smithsonian Conference and in February 1973 leads to increases in the dollar value of the SDR, first to \$1.08571 and then to \$1.20635. The latter value is being maintained by the Fund for another year and a half, even though the new par value of the U.S. dollar ceases to be observed at once. (Polak (1979), p. 627). From July 1, 1974, the valuation method of SDR comes to be known as 'standard basket' approach.

### 3.3.1 Standard Basket Approach

The 'standard basket' approach in valuing the SDR is adopted, when the Fund redefines the value of the SDR as fixed amounts of 16 leading currencies in international trade, each having a share in the world export of goods and services in excess of 1 per cent on average over the period 1968-72. (For a detailed analysis, see, Polak (1979). As of July 1, 1978, the currency composition of the SDR (both currencies and weights) is revised on the basis of export data for the period 1972-76 (IMF (1987a), p. 53).

Large number of currencies in the basket creates problems for valuation primarily because of the fluctuations in their trading behaviour. Similarly, the composition and assignment of weights are problematic and they cannot be used outside the Fund. Therefore, the Fund decides, with effect from January 1, 1981, to reduce the number of

currencies in the basket to 5 most important currencies in the world trade and establishes procedures for subsequent revisions.

3.3.2 Revision Mechanism with respect to Valuation

According to Article XV, Section 2 (IMF (1976)) any fundamental change in the principle of valuation cannot be made unless agreed upon by a high majority. The criteria for revision of SDR valuation are listed below.

(i) The list of currencies that determine the value of SDR is revised every five year period from January 1, 1981. The performance of the country's participation in world's exports of goods and services of the last year of the 5 year period is normally taken into consideration. After the introduction of the 5 currencies basket, the composition of the basket has not changed yet.

(ii) Any revision in the percentage weights for the currencies in the valuation basket reflects the relative significance of the currency in the world trade. The percentage calculated are rounded to the nearest one per cent.

(iii) Normally due consideration is given to maintain a stable value of SDR. The valuations are made in such a manner that the value of the SDR on the last business day preceeding the effective date of the new basket will be the same under the method of valuation in effect before and after that date (IMF (1987a), p. 53).



### 3.3.3 Method Used for Valuation

At present the valuation of SDR is done daily by the Fund as the sum of values in the U.S. dollar, based on market exchange rates, of specified amounts of five currencies in the basket (IMF (1986), p. 269).

The daily calculation is based on specified quantity of each currency. So, the percentage share of each currency changes daily as a result of changes in the exchange rates. The value of SDRs in terms of currencies other than the U.S. dollar is determined by applying the representative exchange rate for that currency in terms of U.S. dollar to the SDR value of dollar. Let us take into consideration the valuation method in a slightly detailed fashion by referring to Table 3.3, where valuation of a particular day is shown.

$$1 \text{ SDR} = .42 \text{ U.S. \$} + .19 \text{ DM} + .15 \text{ Y} + .12 \text{ FF} + .12 \text{ £}$$

To find out U.S.\$ equivalent,

$$\begin{aligned} 1 \text{ SDR} &= \frac{0.452}{1.000} + \frac{0.527}{2.198} + \frac{33.400}{163.980} + \frac{1.020}{7.010} + \frac{0.089}{0.653} \\ &= 0.452 + 0.240 + 0.203 + 0.145 + 0.137 \\ &= 1.177 \text{ \$} \end{aligned}$$

Similarly, the SDR value in terms of other currencies can also be found out.

Table 3.3 : SDR valuation on June 30, 1986

Currency	Currency amount	Weight-age	Exchange rate	U.S. \$ equivalent
U.S. dollar	0.452	42	1.000	0.452
Deutsche Mark	0.527	19	2.198	0.240
Japanese Yen	33.400	15	163.980	0.203
French Franc	1.020	12	7.010	0.145
British Pound Sterling	0.089	12	0.653	0.137
			Total	1.177

1 SDR = 1.177 U.S. dollars

Source : IMF (1986), p. 269.

#### 3.3.4 Behaviour of Value

To find out the behaviour of value of SDRs the Fund takes into consideration the dollar value, ECU value and the SDR value of these 5 currencies for the period 1979-85. The monthly averages of observations are taken for the same period. Computing coefficient of variation and annual average percentage change in the value, it concludes that SDR value of all currencies except for Japanese Yen has been more stable. (IMF (1987a), p.54).

### 3.4 U s e s

All Fund members are participants in the SDR department. The Fund itself may accept and use SDRs in transactions and operations specified in the Articles of Agreement. It has also the power to prescribe "other official entities" as holders of SDRs (at present there are 16 of them). These "official entities" may acquire and use SDRs in transactions and operations by agreement with any participant or other prescribed holders but do not receive allocations. The obligatory clause is not applicable to them. The official SDRs may be used in the following ways.

"(i) Members with a balance of payment need may use SDRs to acquire foreign exchanges in a transaction with designation, i.e. one in which another member, designated by the Fund, provides freely usable currency in exchange for SDRs. The Fund designates members to provide currencies in exchange for SDRs on the basis of the strength of their balance of payment and reserve positions. However, a member's obligation to provide currency does not extend beyond the point at which its SDR holdings are three times its total allocation.

(ii) Fund members may also use SDRs in a variety of voluntary transactions and operations by agreement among themselves and prescribed holders :

(a) to obtain currency in transactions by agreement with other members, without any requirement of balance of payments need; for example, any currency may be exchanged for SDRs, provided that the transactions are made at the official exchange rate against the SDR as determined by the Fund, which, in turn, is derived from the representative exchange rate for that currency against its intervention currency.

(b) in swap arrangements, in which a member may transfer SDRs to another member in exchange for an equivalent amount or another monetary asset, other than gold, with an agreement of exchange rate as well as date of return.

(c) in forward operations, in which members can buy or sell for delivery at a future date against currency or another monetary asset, other than gold, at an exchange rate agreed to by the members.

(d) to make loans for SDRs, at interest rates and maturities agreed to the parties (repayments of loans and payments of interest may be made with SDRs).

(e) to settle financial obligations.

(f) as security for the performance of financial obligations, in either of two ways :

1) members pledging SDRs, which can be earmarked for the duration of the pledge by being recorded in a special register kept by the Fund

2) members agreeing that the SDRs will be transferred as security for the performance of an obligation and that the SDRs will be returned to the transferer when its obligation under the agreement has been fulfilled, and

(g) in donations (grants)." (IMF (1986), pp. 260-269).

### 3.5 Interest Rate

(i) A member country which has excess holding of SDRs (i.e. excess of its allocation) earns net interest on the excess holding. A member country holding SDRs below its total allocation pays net charges. These net SDR interest or charges are payable quarterly. These payments of interest and charges are, self-balancing, i.e. the net charges payable by users are sufficient for the payment of net interest to those members that hold SDRs above their allocation and for the payment of interest to Fund's General Reserves Account, and to Prescribed Holders.

(ii) At present, the interest rate on SDRs is being determined weekly by reference to a combined market interest rate, which is the weighted average of interest rates on specified short term obligations in the money market of the

5 countries whose currencies are there in the SDR market. (For a detailed discussion refer IMF (1987a), p. 57, footnote 67.). As of 27th April, 1987, SDR interest rate is 5.80% (IMF (1987b), p. 93).

After dealing with all mechanisms, we are equipped to discuss various issues involved with the SDRs in Chapter IV.

## CHAPTER IV

### SOME ISSUES RELATING TO SPECIAL DRAWING RIGHTS

This chapter focuses on four major issues relating to SDRs. The issues are the link between SDRs and Development Finance, extension of role of SDRs through substitution, potential role of SDRs under the present international monetary system and possible further improvements in existing SDRs. These issues are important in policy formulation with respect to SDRs which has some relevance even today.

#### 4.1 The Link Between SDRs and Development Finance

An oft-repeated proposal with distributional implications involving the SDRs has been the link proposal. The aim of the proposal is to link SDR creation to the provision of development finance by changing, directly or indirectly, the distribution of SDRs in favour of developing countries. The proponents of such a proposal have argued that it would contribute to the liquidity and stability of the international monetary system by strengthening the positions of developing countries.

##### 4.1.1 Views as Found in the Literature

Stamp (1958) is the first person who proposes the

creation of fund certificates and issuance of them to the developing countries. Even in Triffin's (1960) plan one sees linkage between liquidity creation and development finance through partial open-market purchase of World Bank bonds by the expanded IMF. Hawkins and Rangarajan (1970) conclude that quotas provide an inadequate criteria for SDR allocation, since the original quota formula reflects economic relationship and reserve holding of around 1943. In their opinion, even the subsequent changes in the quota formula are found to have been based on political pressures rather than systematic analysis. Bird (1978) argues that the quotas as a criteria for SDR allocation is inappropriate as they do not take into consideration the needs of the developing countries. Even Brandt Commission (1980) holds the same view and recommends creation of World Development Fund through which SDRs can be allocated depending on the reserve needs in favour of developing countries.

Many proponents of the link argue that developing countries suffer from greater instability in export earnings than the developed countries, and distribution of new reserves in the form of SDRs will help them in easing the adjustment process stemming out of the external fluctuations. UNCTAD report (1981) supports that since the need for reserves is relatively higher in developing countries than in developed countries, developing countries should receive allocation shares based upon 150 per cent of their



quota, with the allocation shares of the developed countries reduced correspondingly.

Williamson (1973, 1977) argues that under the existing system, the seigniorage remaining after the payment of interest is distributed in proportion to Fund quota, which is distributionally neutral. To the extent that quotas measure the longrun demand for reserves, countries will tend to be neither longrun net users nor longrun net holders. His main argument for establishment of a link is egalitarianism and in the absence of any compelling argument against a link, more redistribution is to be preferred to less.

There also exist strong views against the link proposal. Haberler (1971) argues that the pressures for more allocation can lead to an undesirably rapid rate of reserve creation which can be inflationary. But Dornbush (1980) finds out that potential inflationary consequences of the link is very small. However, the link may undermine the integrity of the SDR by increasing the probability of default on interest payments if all net users are low-income countries. Linked up with this issue is the issue of aid to developing countries. Haberler (1971), and Johnson (1972) argue that national governments, unless 'tricked', will reduce conventional aid by an amount equal to the aid

component in linked SDR allocation and moving a step further they argue that it is not beneficial from the developed countries point of view.

#### 4.1.2 Some Considerations

Almost all proposals for linking liquidity creation to development aid under SDR scheme primarily talk about two types of links. 'Inorganic link', through which developed nations agree to make voluntary contributions to development agencies at the time of each SDR allocation and 'organic link', which involves a more formalised connection between the SDR creation and aid.

But under the present ambit of IMF, use of the SDR for the additional objective of reserve transfer to the developing countries through allocation can take several forms. Our focus is on organic link under which direct allocations to developing countries will involve adoption of a new formula which will enable to channel resources to developing countries, not linked up with the quota.

Direct allocations to developing countries can be cost effective. Increasing gross reserves through SDR allocation than through borrowing in the capital market saves the spread between the rate at which the developing countries can borrow in that market and London interbank bid rate, at which proceeds are deposited. If the SDR

holdings derived from allocations are viewed as equivalent to an unused line of credit, the holders will save the commitment fees that will otherwise be incurred if such a line of credit are established with banks. If fully used, the allocations may entail annual interest rate saving compared with the borrowing from the capital market. These savings can be obtained by all countries operating under similar financial circumstances by merely letting the composition of their gross reserves portfolio change over time and not by allowing either reserves or imports grow faster than otherwise will. Developing countries, whose reserves or imports have been constrained to the level than they desire on account of credit rationing and risk prescription in international financial markets, can reap even greater benefits from fresh SDR allocations. Again, availability and the absence of advance limitations on maturity will be beneficial to most of the developing countries under conditions of credit rationing. At the extreme, the cancellation clause can be applied in the event of crossing the limit.

Whereas direct allocation to development finance institution or to the Fund will involve a shift of total allocated SDRs to these institutions, allocation of SDRs to the Fund for relending rather than allocating them disproportionately to such countries will provide conditional

resource transfer, as SDR holding of members will be created through the Fund's lending rather than unconditional allocation based on quota. Broader problems can arise in connection with authorisation to the Fund to issue SDRs, for financing its own lending to developing countries. Conceptually, SDR deposits created by Fund lending can involve an expansion of international reserves in the same way as central bank purchase of government securities in the open market increase the reserve of the domestic banking system. If some countries acquire more SDRs from other countries and let their total reserve grow more rapidly than they otherwise would have been, they will have to offset faster growth of the foreign component of their monetary base with slower growth in the domestic component if they wish to stick to their domestic money supply target.

Now, if the Fund is empowered to issue SDRs for the special purpose of financing its lending for balance of payments adjustment in the developing countries, it will have power exceeding that of any central bank, since central banks are not generally authorised to acquire assets that may be subject to default and liquidity risks by issuing their own liabilities to captive holders under their jurisdiction. But, for the Fund to provide SDRs to some countries for transfers to others is part of the essence of the link proposal, whether the SDR created

directly in the process of Fund lending or through allocation to countries depend on the net users.

However, both inorganic and organic link variation can be formulated in either a tied or an untied manner. If it is untied guise, first round spending of SDRs can be unrestricted, whilst in tied scheme, the location of SDR spending will be restricted to those countries which express a willingness to pay the real-resource cost implied by an acquisition of earned SDRs. Anyway, if SDR linked allocations can be concentrated on LDCs, and the interest rate on their use be subsidised, then the aid link will, without doubt, provide substantial assistance for the economic development of the poorer countries (UNCTAD (1984)).

#### 4.2 Extension of Role of SDRs through Substitutions

Eversince the major exchange rates have started to float, the idea of substitution has been discussed in the literature. It is proposed that SDRs can make a greater contribution to the stability of the reserve system if it is used to help insulate the values of reserve portfolios from the effects of exchange rate variability and to facilitate adjustments in currency composition of official portfolios without generating exchange market effects. This can be accomplished through the substitution of SDRs or SDR-denominated assets for foreign exchange reserves.

Proposals to this effects have been discussed intensively during the periods 1973-74 and 1979-80.

#### 4.2.1 Proposal of 1973-74

Committee of Twenty (1972) has a keen appreciation of the fact that any increase in official holdings of SDRs will reduce the demand for other reserve assets and provide for substitution as long as there is no change in the demand for reserves in total (IMF (1979), p. 166). It is thought that rapid progress towards the goal of increasing the role of the SDR in the international monetary system will require more direct measures of substitution, where substitution has been defined as the replacement of short-term currency assets by liquid claims on the international community in the form of SDRs; the principal effect being to change the composition of reserves while the volume remains the same.

Elements of reserve creation will remain only to the extent that the proposed substitution account will issue SDRs to reserve centres against payments of their own currencies, as it may be authorised to do if reserves shall ever decline below some predetermined level. This substitution account is designed to convert official holdings of "old" foreign currency balances into an internationally accepted and nonredeemable asset. It is

expected to facilitate the restoration and subsequent maintenance of general convertibility by reducing the strains on the system that may result if reserve centres are faced with demands for the net conversions of existing balances of their currencies.

Again, there is some concern that voluntary substitution on a continuing basis can adversely affect foreign exchange markets and that the SDR can become the preferred alternative to other reserve currencies which are least desired, with speculative movements out of reserve currencies because of the advent of substitution. The Fund's suggestion is that the adverse effects of substitution in discouraging adjustments of reserve centres are to be reduced by requiring that currency balances surrendered to the substitution account be eliminated gradually over time by asset settlements on the part of the issuers of the currencies where settlement can take the form of earmarking some portion of SDR allocations received by the reserve centres for amortisation.

Since 'old' balances outside the scope of substitution will still be convertible and because 'new' balances can pile up in future, SDR substitution has to be constrained by measures designed to control the growth and composition of international reserves. Therefore, funding short term currency assets with long term and less liquid

claims and substituting SDRs are considered in relation to control of international liquidity. Any foreign exchange acquired by official holders will then be immediately presented to the issuer for conversion into SDRs and control over liquidity growth.

But because of diverse interests and economic circumstances, no agreement is reached on any global formula or on its application to individual countries. Through substitution, it is conceived that there is going to be a reduction in the proportion of global reserves held in the form of currency balances. However, it is recognised that official attitude towards such a reduction will depend on the characteristic of SDRs, the timing and extent of allocation, and development of new formulae for achieving the target. Again, there is the fear that the establishment of such an account will divert credit from international credit markets. Developing countries emphasize their need to hold currency balances in credit lines that can be used for commercial purposes as well as in support of development programmes and SDRs cannot perform the role of currency holdings as long as they cannot be held in the private sector. Even some developing countries' currency holdings are partly the counterpart of foreign debts incurred in order to enable them to hold reserves. Now, let us examine the proposal of 1979-80.



#### 4.2.2 Proposal of 1979-80

During this period dollar starts depreciating, putting the regulation of international liquidity as one of the major issues. So, it is argued in various Fund documents that countries will hold a certain minimum proportion of their international reserves in the form of SDRs. Adjustment in the aggregate volume of SDR and/or in required minimum ratio of SDRs to non-gold reserves can then also bring about international management of the total amount of international reserves. Under an approach of this kind, the SDR will become the centre of international reserve system without necessarily being the exclusive or main reserve asset, yet can provide safeguard against an unconstrained expansion of international liquidity and resulting inflationary potential. But it does not receive any wide attention.

Under the environment of dollar depreciation, unless countries decide to shift part of their reserves into SDR-denominated assets, many of them, it is feared, may further diversify their reserves by purchasing in the markets, currencies that have already substantially appreciated in real terms against U.S. dollar. So, it is felt under these circumstances, SDR substitution for currencies will not only help avert undesired pressures on currencies but also contribute in making the SDR the principal reserve

asset as proposed in the 2nd Amendment of Articles of Agreement.

Willet(1980) & Kenen(1983b) view that in order to achieve substitution, in a widespread voluntary basis and on a large scale, the account shall contain satisfactory provision with respect to the liquidity claims, their rate of interest, and preservation of their capital value. The claims shall have a yield that will make them sufficiently attractive in comparison with other major reserve components, implying that they shall yield a market-oriented return.

Payment of such a yield and maintenance of capital value has to be assured through arrangements covering two sources of risk in the trust/Fund in which the substitution account may be lodged. First, the trust is exposed to exchange risk that can cause the SDR value of its U.S. dollar investment to deviate from the SDR value of its interest-bearing SDR obligations to members, thereby creating a discrepancy. Second, the SDR value of interest received in U.S. dollar can differ from that of interest payable on SDR obligations, thereby giving rise to another sort of discrepancy. Since there is no assurance for matching both the discrepancies, a substantial amount of uncovered risk has to be provided for.

So, the attempt to construct a substitution account envisages an account administered by the Fund, so as to avoid the complications of committing specific Fund resources to back up such an account (Polak (1979, 1980)). To lessen the problems associated with an alleged dollar overhang and with sudden and disruption switches between reserves and for improving the functioning of the international monetary system, strong recommendation for establishment of a substitution account is suggested by Gold (1981).

#### 4.2.3 Some Considerations

Most of the ideas with regard to substitution are based on the promise that only in a highly structured, centralised system with tight international controls, the SDR will be the obvious choice for the major reserve asset and holding of other reserve beyond working balances will be phased out (Willett (1980), Corden (1983)). Then only SDR will become the major asset for settlement and reserve holding in an internationally agreed framework, organised around mandatory asset settlement or around less stringent norms affecting global control over international agreement. But, the practicality of such a proposal is being challenged in context of present international monetary system where more than one asset behave as reserves and private credit can be got by creditworthy countries in the form of foreign exchanges for payment and adjustment purposes.

However, the question is still relevant in the sense that under the system of floating and multiple reserve assets, interest rates, and exchange rates have been adjusting and will be continuing to adjust so as to eliminate any incipient excess supply of foreign exchange by private and official holders. A substitution account for official holders can interfere with the market's evaluation of exchange prospects, if expectations are raised that substitution opportunities may be provided on future occasions if any reserve currency's weakness, when the account is open-ended. The prospect of any currency overhang being taken off the market can lower the cost of monetary and intervention policies leading to such an overhang by reducing the risk of subsequent exchange valuation loss through the establishment of substitution account. Substitution arrangements can then encourage intervention and make SDR a more substantial competitor with private and official holding of monetary assets and financial claims. (For a detailed analysis refer Von Furnstenberg (Ed.) (1983), pp, 567-571).

#### 4.3 Potential Role of SDRs in the Present International Monetary System

Since 1970s, a number of structural changes in the international monetary system have taken place raising questions concerning the role, SDRs can play. The significant

changes are suspension of the convertibility of official U.S. dollar balances into gold, advent of greater exchange rate flexibility, expansion and integration of international credit markets and growth in importance of currencies other than the U.S. dollar in the official reserves. Based on the available literature, in this section we will discuss potential role of SDRs contributing to economic stability under the present economic environment (IMF (1987a), Von Furnstenberg (Ed.) (1983), various issues of IMF survey and Annual reports, Mundel and Polak (Ed.) 1976)).

#### 4.3.1 Availability of Reserves and Economic Stability

Under the present international monetary system, two elements are important as policy matters in achieving stability. First is the obligation of countries with exchange rate policy and second, the policies through which reserves are made available to countries. Our purpose is to see how reserves are available today and in what way, SDRs as a part of reserve system can be used to achieve stability.

In the broader objective of world economic stability, reserves can have a stabilizing effect by insulating countries' policies from temporary disturbances and by permitting orderly adjustments which may be time-consuming, to abrupt permanent changes affecting the balance of payments.

Reserves also permit the continuation of destabilising policies as far as the held reserves last. Approximate arrangements with respect to the supply of reserves must then be relied upon for limiting the effects of destabilising policies on the countries pursuing these policies and on the world economy as a whole.

In 1980s, exchange market transactions in a day or a week amount to values comparable to those trade flows over a quarter or a year. As a result, the task of stabilising the external sector of any economy through the use of reserves is more difficult. Further, the way reserves are acquired is also different compared to earlier decades.

Under the present monetary arrangements, many countries can increase their foreign exchange reserves in an easy manner either by purchasing reserve currencies with national currency in the exchange market or by borrowing reserve currencies in private capital markets, while other countries find it difficult to get an international market for their national currencies and have limits on their access to credit markets. Apart from any SDR allocations or conditional credits they may receive, these countries have to provide themselves with reserves through current account surpluses.

Under the present international monetary system, an

important element of supply of reserves mainly depend on the decision of many private institutions whose decisions often constitute responses to developments that potentially affect the profitability of these institutions. Secondly, "the time lag in these responses, together with a tendency towards exaggerated reaction to stimulate in a group of competing agents, provide a decision pattern which is characterised by overshooting, where periods of excessive expansion in the supply of reserves is being followed by periods of contradiction" (IMF (1987a) p.15)). So, credit-worthy deficit countries can prevent the decline in reserves through external borrowing, at the cost of interest payments accruing on the loans incurred. The mounting indebtedness and higher interest charges may speed up adjustment action, but they may fail to do so, especially if the funds needed for making interest payments can themselves be borrowed. In that circumstance, the deficit does not impose immediate real burden on the country in question and be allowed to continue till the indebtedness reaches a level at which creditworthiness is lost and severe adjustment measures have to be taken.

Again, reserves are held in the form of financial assets denominated in a number of reserve currencies allowing for the values of reserves to fluctuate in the face of movements of exchange rates of these currencies.

Any decision to alter the currency composition of reserve may under certain circumstances also destabilise exchange market.

So, the mechanisms through which the current reserve system provides liquidity has some adverse effects on the stability via scale of availability of reserves and distribution of reserves. SDRs can play an important role in lessening if not alleviating these instability problems.

#### 4.3.2 Potential Role of the SDRs

Lack of an automatic 'governor' puts no restriction on the supply of liquidity, thereby sometimes creating inflationary pressures and at other times restricting many countries access to international credit putting an hindrance on their growth. Again, the inability of the reserve-generating process, which is based on decentralised private decision making, to provide stable reserve growth at an appropriate rate leads us to analyse whether SDRs can help to bring the process under better international control. "For this purpose SDR would have to be able to play the role of an international money that is itself under the control of international community and through which other international monetary aggregates can be influenced". (IMF (1987a), p.21). SDR allocation - a mechanism which is already there can provide the necessary supplementation to private credit



and can provide a safety net for the world economy. A sudden tendency towards overexpansion in private lending can be remedied through cancellation, provided the stock of SDRs are large enough to permit the intended reduction in reserves. Their success lies in the controlled liquidity growth, the feasibility of this system depends on much more centralisation of decision making process.

This leads us to discuss the compositional problem inherent in a multicurrency reserve system with floating exchange rates. The SDR as a basket of major currencies can provide some protection for reserve holders against fluctuations in the value of their holdings as a result of exchange rate changes. To enable this, the substitution proposition has to be taken into consideration.

As far as distributional shortcomings are concerned, remedying the advantage of the reserve currency countries with the help of SDR is limited. Because easy access to liquidity enjoyed by reserve countries, if given to other countries, will jeopardise the global stability by weakening discipline throughout the international economy. The only possible way will be the replacement of the current reserve system with SDR based reserve system which seems practically impossible.

With available mechanisms, we can overcome some

problems but not all. The important mechanism of allocation and cancellation are quite relevant for our purpose of analysis. SDR allocation can supplement the creation of other reserve asset when their supply is judged to be insufficient. Similarly, cancellation of SDR can reduce the rate of growth in the overall supply of reserves if it is judged to be excessive, but cancellation is limited to the existing stock of SDRs, and the achievement of a reduction in the rate of reserve supply is depended on the existence of initial stock of SDRs. Through allocation over a longer period of time can gradually replace borrowed currency reserves with owned reserves and can improve the overall quality of reserves.

But under the present IMF's Articles of Agreement, where the specification that the need for reserve supplementation must be of a 'long term' character is more difficult to relate to the purposes we just discussed. The requirement, as is seen today's world, is mainly through greater reliance on owned rather than borrowed reserves which can help the countries to overcome widespread fluctuation. With a given long-term demand for reserves, a shift from borrowed to owned reserves which can be done through steady periodic allocations, which is a less costly source of reserve than borrowing in capital markets, can lead to compensating adjustments in the long run rate of growth of foreign exchange

reserves. The effect of allocation will then be the improvement of quality of reserves.

Since direct control over liquidity creation process is not feasible under the present institutional arrangements, an international surveillance over the policies of all members presents the only practical mechanism for control over international liquidity.

#### 4.4 Further Possible Improvements in Existing SDRs

Through some minor modifications, SDRs can be set at par with already established reserve assets under given multicurrency reserve system. Ideally speaking, anything which can be accepted as a reserve in the international monetary system ought to have few characteristics like the relative stability of their value, the ease and safety with which they can be invested, the ease with which they can be liquidated and their global acceptability in settlement of financial and commercial obligations. The satisfaction of all these characteristics strictly is not an easy proposition but near satisfaction of these characteristics is not so difficult. The SDRs to achieve the broader role and becoming attractive relative to other reserve assets, their yield and value must be market related and wide-ranging. Based on the relevant available literature few suggestions have been proposed here about how to make it much more

attractive. (IMF (1987a), Coats (1982), Lomax (1983).)

The characteristics emphasised here are liquidity, valuation, interest rate, and fund operations.

#### 4.4.1 Liquidity

By liquidity, we mean the ease and speed with which SDRs can be used for whatever financial needs their holders may have. The liquidity of SDRs has been assured through the designation mechanism for the participants having a balance of payments need since its inception. There also exist transactions through agreement, where liquidity depends on the consensus of both the parties. Our prime objection is against designation, which gives SDRs an unattractive quality by restricting participants to choose freely the amount of SDRs they will hold in their reserve portfolio. Since SDR's liquidity ultimately rests on the willingness of participants and other holders voluntarily holding and acquiring, its attractiveness directly becomes comparable to other reserve assets. Though over time the Fund has attempted to improve the liquidity of SDRs by cautiously expanding the number of uses to which it can be put and diminishing the restrictions that inhibits such uses, the major limitations in terms of use of equal value exchange rates in spot transactions, the requirement of 'collaboration' among participants still put some hindrance on its use.

For the purpose of making it more attractive, the Fund should develop the ability to buy or sell SDRs on short notices, create a market for SDRs and function itself as a lender of last resort, thereby easing the designation clause and making it an international means of payment. Simultaneously with monitoring the demand side, it should find out potential sellers and ascertain their willingness to provide SDRs for which development of a good information system is very much important. Again, the extension of forward contracts and swaps should be increased.

But the question may arise that enhancing the liquidity of SDR may, however conflict with the aim of stability in the international financial system, which require avoidance of major shifts into and out of reserve currencies. While maintaining some controls on the uses of the SDR that reduce its inutility for speculation does not reduce the potential instability between remaining reserve assets, but it discourages the broader use of a potentially stabilising asset with hedging characteristics such as SDRs. So, a controlled liquidity expansion may enable it to come out as a major reserve asset.

#### 4.4.2 Interest Rate

If SDRs are to be actively used in the international monetary system, the effective yield on the SDRs should be

high enough to make it attractive to acquire and hold, but not so high as to make the countries reluctant to use the SDR when they are in deficit. So, care should be taken to make yield on SDR holdings more attractive for which a continuous adjustment of the interest rate is required. Increased frequency of adjustment of SDR interest rate, frequency of payment of interest, regular comparison with combined market rate and reference basket to which the interest rate level is attached, can play important role in this direction.

Instead of determining the interest rate weekly, it may be set daily on the basis of previous business day's combined interest rate. If the interest rate on the SDR are to be adjusted more frequently, interest (and charges) may also be credited (debited) more frequently, which has the drawback that participants needing to acquire SDRs to pay out charges in the SDR department more frequently rather than quarterly as at present. But they have the advantage that the amounts required on each occasion will be smaller. Again, if measures can be taken to improve the opportunities for holders with no balance of payments need to sale SDRs when they wish, the daily interest rate will be more appropriate as it will reduce the unforeseen risk of transacting in SDRs.

#### 4.4.3 Valuation

Here, discussion is not on the SDR valuation basket, but about the exchange value of SDR. Determination of the exchange value of the SDR against a currency, depends on the composite basket and particular exchange rate used in computing it. The use of SDRs as a unit of account requires conversion of SDR values into national currency values. If Fund's official values differ much from the market value, the official values will tend to be avoided by the market. At present, the need in the market to cover costs and to compensate risk with a spread between the buying and selling rates differ significantly from the Fund value thereby jeopardising the use as well as attractiveness of official rates. The use of official SDR rates against other currencies are determined on the basis of representative exchange rates of these currencies, which are not normally the market rates. So, the Fund should fix the value of the exchange rate more than once daily or they can give the transactor the freedom to determine their own rates.

Once the SDR is seen as fully competitive with alternative reserve assets, it is desirable to allow self-determination of exchange value of SDRs. Alternatively, the difference between official rates and market rates can be reduced in negotiated transactions by the use of most current of multiple daily fixing of the official rates.

#### 4.4.4 Fund Operations

Last but not the least, widespread use through Fund operations may breed familiarity of SDRs in the international monetary system which is very much important to make it a common unit of account and medium of exchange. To do so, more extensive use for purchases and repurchases from the Fund's General Resources Account, allowance of the Borrowed Reserves Suspense Account and the Administered Account to hold SDRs, <sup>and</sup> more borrowing of SDRs by the Fund are essential.

#### 4.4.5 Comparison Between ECUs and SDRs

The above mentioned considerations will not be complete unless there is a comparison with a similar unit called European Currency Units (ECUs), which has been more successful in a small European monetary system than SDRs in a large international monetary system and suggestions can be based on the comparison of the two units.

The method of determination of the value of two units in terms of currencies, which is relevant to all of their functions, are similar in a number of technical respects; both are composites of a number of national currencies, and their values and yields are determined administratively by reference to the component currencies.



But their currency composition and roles as official instruments differ in important respects contributing to a number of contrasting developments in their uses in official and private circles.

ECU unit serves as "numeraire" of the exchange rate arrangements of the EMS, and "official ECU" - which represents in essence a redenomination of other existing reserve assets is used in settlements in support of those arrangements. The SDR does not serve any settlement function under the present exchange rate arrangements, whereas, official ECUs form a significant part of the EC member's reserves. The SDR as a part of total international reserves is not so significant.

Most importantly, the ECU's regional currency composition, its link to the exchange rate arrangements of the EMS, various valuation considerations, demand and promotion by EC entities, various restrictions and tax considerations have contributed to the rapid development of a market for private ECU financial instruments, primarily not exclusively in European capital markets. The SDR has not attracted comparable interest in private markets, although it has been adopted as a unit of account by a number of international organisations. At present, the development of private SDRs, which starts in 1975 onwards, do not show any sign of expansion. Since to make ECU as a successful

currency unit, the impetus has been provided by the activities of EC entities and member states through creation of practical demands by denomination of various payment obligation, borrowings, and other transaction; to achieve the same objectives private SDRs should be developed. The growth of commercial SDRs has to be developed under the present set up in response to evolving preferences for more diversified, multicurrency portfolios as a means of managing the increased exchange risk involved under the system of floating.

After the discussion of these issues, let us proceed to evaluate the performance of the SDR system.

## CHAPTER V

### EVALUATION OF PERFORMANCE OF SDRs

In evaluating the performance of SDRs in this chapter, we have taken into consideration two aspects. First, we provide a brief summary of transactions in SDRs which reveals its growth in use. Second, we analyse SDRs as a part of the reserve system and examine its significance.

#### 5.1 Summary of Transactions and Some Uses

An examination of Table 5.1 enables us to interpret how SDRs have performed. Since the first allocation in 1970s, the number as well as the value of transactions in the SDR department has grown over the years. Members have transferred substantial assets of SDRs in transactions with designation and by agreement, and to make payments to the Fund's General Reserves Account for repurchases, charges and quota payments. Total transfers totals 127,149 millions of SDRs by the end of April 30, 1987. The total transfers of last 3 years of our analysis shows a declining trend, which primarily follows from the Fund's objective of restricting transfers from participants to General Reserve account.

Table 5.1 : Summary of transfers of SDRs, January 1, 1970 - April 30, 1987

(in million SDRs)								
	Annual average Jan.1,1970 - April 30, 1981	Financial years ended April, 30						Total Jan.1, 1970 - April 30, 1987
		1982	1983	1984	1985	1986	1987	
<u>Transfers among participants and prescribed holders :</u>								
<u>Transaction with designation</u>								
From own holdings	240	661	968	89	98		27	5,015
From purchase of SDRs from Fund	336	1,213	1,745	2,313	2,055	1,360	1,249	13,741
<u>Transaction by agreement</u>	527	1,242	1,281	3,175	2,706	2,677	3,925	20,975
Prescribed operations	-	158	396	1,194	161	111	786	2,807
Net interest on SDRs	73	245	273	188	326	313	305	2,480
Total	1,176	3,250	4,664	6,959	5,345	4,910	6,292	45,018
<u>Transfers from participants to General Reserve Account</u>								
Repurchases	439	838	566	392	717	1,183	1,671	10,343
Charges	355	968	1,497	2,168	2,927	2,915	2,283	16,778
Quota payments	469	266	83	6,195	14	1	155	12,025
Interest received on General Reserves Account SDR holdings	48	657	444	147	506	312	162	2,868
Assessments	1	2	2	3	4	4	4	32
Total	1,311	2,732	2,593	8,905	4,268	4,415	4,275	42,046

contd.

Table 5.1 : (contd.)

	Annual average Jan.1,1970 - April 30, 1981	Financial years ended April, 30						Total Jan.1, 1970 - April 30, 1987
		1982	1983	1984	1985	1986	1987	
<u>Transfers from General Reserve Account to participants and prescribed holders</u>								
Purchases	543	2,035	2,419	3,876	2,595	1,965	1,779	20,819
Repayments of Fund borrowing	23	144	28	787	129	533	1,007	2,892
Interest on Fund borrowing	10	143	224	202	446	721	404	2,256
In exchange for other member's currencies :								
Acquisitions to pay charges	1	27	162	330	953	1,550	750	3,782
Acquisitions to make quota payments	30	-	-	-	-	-	-	341
Reconstitution	137	-	-	-	-	-	-	1,555
Remuneration	63	348	861	1,573	1,952	1,531	1,088	8,067
Others	23	23	20	35	14	10	10	375
<b>Total</b>	<b>831</b>	<b>2,721</b>	<b>3,714</b>	<b>6,803</b>	<b>6,089</b>	<b>6,309</b>	<b>5,037</b>	<b>40,086</b>
<b>Total transfers</b>	<b>3,318</b>	<b>8,972</b>	<b>10,970</b>	<b>22,667</b>	<b>15,703</b>	<b>15,634</b>	<b>15,604</b>	<b>127,149</b>

Source : IMF (1987b), p. 87.

Under Article V, Section 6 (IMF, 1978), the Fund is authorised to buy or sell SDRs against the currency of other members, though it has done so only for a few specific purposes. Currently the Fund also sells SDRs under this provision to members needing them in order to pay charges to the Fund which is clear from Table 5.1.

Almost all categories of uses have increased which indicates Fund's increased scale of dealing with its members. Voluntary transactions among participants and prescribed holders have increased over the last 5 years. The most important thing to note, is that transactions by agreement has exceeded significantly than transaction by designation with an increasing margin between the two types of SDR transactions.

Again, all credits, borrowings, investments, currency holding, etc., of the Fund as well as resources administered by the Fund are denominated in terms of SDRs. The Fund's use of the SDR denomination in its operations has increased official balances of SDR - denominated assets and liabilities.

It is now also used by the Fund members as the unit against which the value of their currencies is maintained. At the end of 1985, 12 member countries of the Fund have pegged the values of their currencies to the SDR. Under

this kind of pegging, the value of the pegged currency in terms of other currencies is determined by reference to the SDR value of those currencies.

Similarly, a number of international organisations have started using SDRs as their unit of account - prominent of which are few international airlines, international telecommunication department, etc. So, overall speaking, SDRs use and transactions over a period of time have increased at least in Fund related transactions. But this is only a part of the story. The story will not complete unless and until its position in the reserve system is analysed.

## 5.2 SDRs in the Reserve System

For the purpose of analysis of composition of SDRs in the reserve system we refer to Table 5.2. A careful study of Table 5.2 reveals that SDRs have not yet been able to come out as the principal reserve asset. Between 1977 and March 1987, as a percentage of total reserves excluding gold they reflect a very small percentage. For all countries, the range of variation in the percentage SDRs to that of total reserves excluding gold has been between 3.3 per cent and 5.4 per cent. For the whole period, it constitutes on an average of about 4.2 per cent of the total reserves excluding gold.

Table 5.2 : Official holdings of International Reserves, 1977 to March 1987

	(in billions of SDRs)										
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	March 1987
<b>All Countries</b>											
<b>Total reserves excluding gold</b>											
i) Reserve positions in the Fund	18.1	14.8	11.8	16.8	21.3	25.5	39.1	41.6	38.7	35.3	34.3
ii) Special Drawing Rights	8.1	8.1	12.5	11.8	16.4	17.7	14.4	16.5	18.2	19.5	19.3
	(3.5)	(3.3)	(3.4)	(3.7)	(4.9)	(5.4)	(4.0)	(4.5)	(4.5)	(4.6)	(4.9)
Sub-total: Fund Related Assets	26.2	22.9	24.3	28.6	37.7	43.2	53.5	58.0	56.9	54.8	53.6
iii) Foreign exchange	203.6	223.9	249.7	292.9	292.7	285.1	308.4	349.0	348.2	365.5	389.3
<b>Total Reserves excluding gold</b>	<b>229.8</b>	<b>246.9</b>	<b>274.0</b>	<b>321.6</b>	<b>330.4</b>	<b>328.3</b>	<b>361.9</b>	<b>407.1</b>	<b>405.2</b>	<b>420.3</b>	<b>443.0</b>
iv) Gold: value at London Market Price	139.8	179.9	367.1	440.5	325.7	393.1	345.4	297.8	282.6	303.3	310.0
<b>Total</b>	<b>369.6</b>	<b>426.8</b>	<b>641.1</b>	<b>762.1</b>	<b>656.1</b>	<b>721.4</b>	<b>707.3</b>	<b>704.9</b>	<b>687.8</b>	<b>723.6</b>	<b>753.0</b>
<b>Industrial Countries</b>											
<b>Total Reserves excluding gold</b>											
i) Reserve Positions in the Fund	12.2	9.6	7.7	10.7	13.5	17.1	25.6	27.2	25.2	23.0	22.1
ii) Special Drawing Rights	6.7	6.4	9.3	8.9	11.9	14.1	11.5	13.4	14.9	16.1	16.0
	(2.8)	(4.5)	(6.1)	(4.8)	(6.4)	(7.6)	(5.6)	(5.9)	(6.5)	(6.4)	(5.8)
Sub-total: Fund Related Assets	18.9	16.0	17.1	19.6	25.5	31.1	37.1	40.6	40.1	39.1	38.2
iii) Foreign exchange	100.0	127.2	136.1	164.7	159.6	153.2	167.9	183.9	187.3	211.7	234.4
<b>Total Reserves excluding gold</b>	<b>118.9</b>	<b>143.1</b>	<b>153.2</b>	<b>184.3</b>	<b>185.1</b>	<b>184.4</b>	<b>205.0</b>	<b>224.5</b>	<b>227.4</b>	<b>250.8</b>	<b>272.6</b>
iv) Gold: value of London Market Price	119.6	153.4	306.7	364.2	269.0	326.1	286.6	247.2	234.1	251.1	257.3
<b>Total</b>	<b>238.5</b>	<b>296.5</b>	<b>459.9</b>	<b>548.5</b>	<b>454.1</b>	<b>510.5</b>	<b>491.6</b>	<b>471.7</b>	<b>461.5</b>	<b>501.9</b>	<b>529.9</b>

contd.



Table 5.2 : (contd.)

	1977**	1978**	1979	1980	1981	1982	1983	1984	1985	1986	March 1987
Developing Countries											
Total Reserves excluding gold :											
i) Reserve Positions in the Fund	0.5	0.9	4.0	6.1	7.8	8.4	13.6	14.3	13.5	12.4	12.2
ii) Special Drawing Rights	1.1 (2.2)	1.2 (2.4)	3.2 (2.6)	2.9 (2.1)	4.5 (3.1)	3.7 (2.6)	2.9 (1.8)	3.1 (1.7)	3.3 (1.9)	3.4 (2.0)	3.3 (1.9)
Sub-total: Fund Related Assets	1.6	2.1	7.2	9.0	12.3	12.1	16.5	17.4	16.9	15.8	15.5
iii) Foreign exchange	48.3	56.6	113.6	128.2	133.0	131.9	140.5	165.1	160.9	153.8	154.9
Total Reserves excluding gold	49.9	58.7	120.8	137.2	145.3	143.9	156.9	182.5	177.8	169.5	170.4
iv) Gold: Value at London Market Price	15.5	20.2	60.4	76.3	56.7	67.0	58.7	50.6	48.5	52.3	53.2
Total	65.4	78.9	181.2	213.5	202.0	210.9	215.6	233.1	226.3	221.8	223.6

Note : 1 : Figures in the bracket indicate percentage.

\*\* : Indicate figures corresponding only to non-oil developing countries.

Source : Various issues of IMF Annual Reports.

In the present study, periods before 1977 have not been taken into consideration because of lack of homogeneity in the Fund's accounting system. But a study of IMF annual reports of the periods between 1970 and 1977 also reflect a similar trend. However, analysis of last 10 years data confirms with the overall behaviour pattern.

Inclusion of gold value in total reserves, either at constant prices or at London market prices, will pull down the percentage share of SDRs even more. Inclusion of gold value at London market prices significantly affect the value of total reserves primarily because of the fluctuations in the value of gold.

Between the industrial and developing countries, we observe a skewed pattern of distribution, the reason for which is fairly obvious as allocation is based on the quota. But analysis of the percentage of SDRs in the total reserves excluding gold, reveals that for developing countries it is significantly less than that of the industrial countries justifying the request of the developing countries for more SDR allocation in their favour.

Overall speaking, we can say that in Fund operations and transactions, SDRs have emerged as a measure instrument, whereas their impact on the total reserves are not substantial

as they constitute a small proportion of total reserves.  
But the importance of them cannot be ruled out since  
they provide an additional source to finance the countries  
having balance of payments needs without putting the debtor  
nation in much of trouble in terms of high interest cost.

## CHAPTER VI

### SUMMARY AND CONCLUSION

In the present chapter, we summarise the earlier chapters and highlight some of the important conclusions.

In the first chapter, which is the introduction, we have discussed about international liquidity, international money and international reserves (1.1). Then we move on to discuss why and how reserves are demanded in a theoretical framework (1.2). Given the existence of demand for reserves, we have discussed about various sources of supply of reserves in the next section (1.3). In the last part of the first chapter, we briefly state about our purpose of study and the chapter scheme (1.4).

In the second chapter, we have focussed our attention on the issues which have motivated for the creation of Special Drawing Rights. In doing so, we take into consideration insufficient liquidity (2.1), failing confidence in the convertibility of the principal reserve asset (2.2), and assymetries of reserve creation (2.3) which are normally been discussed as the measure shortcomings of the gold exchange standard and these issues generate the thought of creation of some kind of a special reserve asset.

In the first section, we take into consideration the level and composition of international reserves for the period 1948-69 and observe that in the last decade of the above mentioned period the fastest growing component of the international reserves is the foreign exchange (2.1.1). Given foreign exchanges as the major source of international reserves, many authors through their rigorous studies show their discontent about the adequacy of reserves, the popular method followed in their analysis being the study of reserves to imports ratios (2.1.2 and 2.1.3). A careful study of literature concerning issues of insufficient liquidity reveals that there have been a declining ratio of reserves to imports, increasing number of restriction on international transaction, and growing dependence on official credit arrangements giving evidence of inadequacy of supply of reserves (2.1.4).

In the second section, we discuss about the strain on key currency country as well as the declining confidence in the convertibility of the dollar into gold. We argue that how the reserve centre faces a problem in the form of not being able to convert the dollar into gold. The worsening liquidity position, which is a part of the analysis is shown through the analysis of the asset and liquidity ratio. However, establishment of Gold Pool, policy of moral suasion by the U.S. and measures to avoid speculative crisis

provide enough evidence about the detection of the problem (2.2.1).

From there we move on to discuss the question of expected instability issues in the key currency country as well as distributional implications of the seigniorage benefits, which is treated in the third section (2.3).

Once we establish the problems, we move on to discuss various plans like Keynes Plan (2.4.1), Triffin Plan (2.4.2), Stamp Plan (2.4.3), Berstein Plan (2.4.4), etc., which have been considered to overcome the situation. But none of these plans have been concrete in the sense that they do not provide solutions to all the three major shortcomings of the gold exchange standard. So, to overcome the drawbacks, lots of negotiations take place and finally with the decision of majority of countries a unique reserve asset come to the lime light known as Special Drawing Rights (2.5).

In the third chapter we move on to analyse various mechanisms associated with it. The first section provides the answer to what it is by describing the nature of it (3.1). It is defined as a limited competence by one country to acquire an international means of payment from a third country and it is differentiated from the other drawing rights as already stated in the introduction,

in the sense that they are created by the mutual agreement of Fund members and are unconditional in characters, obtained through the allocation mechanism.

We discuss the allocation mechanism in the second section, where we take into consideration Fund's Articles of Agreement. The allocation is based on quota system and requires 85 per cent majority of voting of Fund's voting power. The amount and timing of SDR allocations have<sup>also</sup> been shown (3.2).

After this, the mechanism of valuation of SDRs has been discussed at length in the third section (3.3). In the beginning they are equalised to one U.S. dollar and have been linked up to the value of gold, giving it the name 'paper gold'. But with the devaluation of dollar, the valuation process have changed and basket methodology have been taken into consideration. We discuss about both 16 currencies and 5 currencies basket, putting emphasis on the later one. At present, the valuation of SDR is done daily by the Fund as the sum of values in the U.S. dollar, based on market exchange rates, of specified amounts of the five currencies in the basket (3.3.2). This has been clearly demonstrated by taking into consideration one specific day's exchange rate figures (3.3.3). Then a small portion has been devoted to the discussion of the behaviour of SDR value (3.3.4).

Then in the fourth section, following Fund's literature, we bring out the ways SDRs are used and can be used (3.4). Linked up with all these is the issue of interest rate on SDRs, the methods used for calculation has been discussed in the last section of the third chapter (3.5).

After describing the issues of emergence and mechanisms, we have in the fourth chapter taken up four important issues which are quite often discussed in both the Fund as well as outside with respect to Special Drawing Rights, which are very important for policy formulation as well. The issues are link between SDRs and Development finance (4.1), Extension of the role of SDRs through substitution (4.2), <sup>and</sup> Potential role of SDRs under the present international monetary system (4.3). Last but not the least, few further possible improvements have been suggested based on available literature and there we also draw a comparison between ECUs and SDRs (4.4).

In the first section, we discuss about the proposal of linking SDR creation to the provision of development finance by changing directly, or indirectly, the distribution of SDRs in favour of developing countries. Views both for and against have been put forward (4.1.1). It is argued that how under certain circumstances the proposal considered favourably can become one of the important sources of finance for the developing countries (4.1.2).



We focus our attention on the substitution proposals of 1973-74 (4.2.1) as well as <sup>that of</sup> 1979-80 (4.2.2) in the next section . By substitution, here we mean replacement of short-term currency and liquid claims on the international community in the form of SDRs, thereby changing the composition of reserves, keeping the volume of reserves the same. Then we examine the feasibility of such a proposal which depends on the degree of centralisation in the international monetary system. Then it is argued that the importance of such a proposition cannot be ruled out under present monetary system and hence we have discussed some policy implications of such a proposal (4.2.3).

In the third section, we primarily focus on the few sources of availability of reserves today and given the instability of the world monetary system, how far SDRs will be able to contribute to the stability (4.3.1). In doing so, we discuss about allocation, cancellation, composition and distributional implications of the role of the SDR. Then Fund's off-repeated proposal of making it the principal reserve asset have been discussed (4.3.2).

Then we move on to discuss about how further possible improvements in the existing SDRs can be made. Primarily, we talk in terms of improvement of liquidity (4.4.1), interest rate (4.4.2), valuation (4.4.3), and Fund operations (4.4.4). A brief comparison with a similar

successful unit called ECUs have been done and suggestions have been based on the comparison, where the focus is given on private SDRs (4.4.5).

In the fifth chapter, we evaluate the performance of SDRs. The main conclusion we draw is that though in the Fund related operations and transactions it has emerged as a measure instrument, yet they still constitute a very very small proportion of total reserves. But they are important, since they are unique in their characters and can be very helpful in overcoming the adjustment problem (5.1 and 5.2).

Now, while drawing major conclusions, we say that out of the three issues which are relevant for the creation of SDRs, one of the issues viz. the confidence is no longer important. But, the liquidity as well as assymetries questions are still very important as far as SDRs are concerned. For a controlled liquidity growth, SDRs can play a very important role as has been already argued out (4.2). In that context the proposition of substitution can further be looked into. As far as assymetries are concerned, the issue is still important. Specially in context of the developing countries, where the reserves are very much essential, SDR allocation in their favour can really play an important role. So, a continuous growth of periodic allocation of SDRs is needed if at all it has to come out as if not as the principal reserve asset, but at

least as an important source of supply of reserves.

However, the creation of such an international money or as some prefer to call it as a syncretic asset itself is a revolutionary concept. It represents the very first kind of an interest-bearing reserve asset created by international consensus, which is created and allocated by the Fund to its members. Like commodity money, it is an asset to its holders but it is no one's liability. But unlike commodity money its value as an asset derives not from any intrinsic properties but essentially from the commitments of voluntary participants to hold and accept SDRs and to honour the various obligations thereof. Thus the SDR department, reflects the principle of mutuality and inter-governmental cooperation. The SDR, like the consol type of securities, has no maturity, but unlike the consol, it can be redeemed at par or cancelled. So, SDR is a unique syncretic asset which embodies individual characteristics of diverse assets like commodity money, fiat money and credit money, etc.

## BIBLIOGRAPHY

- Bernstein, Edward, M. (1963), "Proposed Reforms in the International Monetary System", in Herbert G. Grubel (Ed.), (1963), World Monetary Reform, Standord, Standord University Press.
- \_\_\_\_\_ (1965), "Further Evolution of the International Monetary System", in Robert G. Hawkins (Ed.), (1965), A Compendium of Plans for International Monetary Reform, New York.
- Bird, Graham (1978), The International Monetary System and the Less Developed Countries, London, Macmillan.
- Brandt, Willy et al. (1980), North-South: A programme for Survival, report of the Independent Commission on International Development Issues, "Brandt Commission", Cambridge, Massachusetts, MIT Press.
- Brown, Weir M. (1964), The External Liquidity of an Advanced Country, Studies in International Finance, No. 14, Princeton, New Jersey, International Finance Section, Princeton University.
- Callier, Phillippe (1983), "The SDR as a Means of Payment: A Comment on Coats", International Monetary Fund Staff Papers; Vol. 30, pp. 654-655.

- Chandavarkar, Anand G. (1984), The International Monetary Fund: Its Financial Organisations and Activities, IMF Pamphlet Series, No. 42, Washington D.C.
- Clark, Peter B. (1970), "Optimum International Reserves and The Speed of Adjustment", Journal of Political Economy, Vol. 78, pp. 356-376.
- Clower, Robert W. and Richard G. Lipsey (1968), "The Present State of International Liquidity Theory", American Economic Review, Papers and Proceedings of the 18th Annual Meeting of American Economic Association, Vol. 58, pp. 586-595.
- Coats, Warren L., Jr. (1982), "The SDR as a Means of Payment", International Monetary Fund Staff Papers, Vol. 29, pp. 422-436.
- Committee of Twenty (1972), Report of Committee of Twenty on International Monetary Fund, Washington, D.C.
- Corden, W.M. (1983), "Is there an important role for the SDR?", in George M. Vonfurstenburg (Ed.), (1983), International Money and Credit: The Policy Roles, Washington, D.C.
- Dornbush, Rudiger (1980), "Exchange Rate Economics: where do we stand?", Brookings Papers on Economic Activity, No. 1, pp. 143-206.
- De Vries, Margaret Garrison (1978), The IMF 1966-71, The System Under Stress, Narratives, Vol.1, Washington, D.C.

- Fischer, Stanley (1983), "The SDR and the IMF: Towards a World Central Bank?" in George M. Vonfurstenburg (Ed.), (1983), International Money and Credit: The Policy Roles, Washington, D.C.
- Flanders, M. June (1973), The Demand for International Reserves, Studies in International Finance, No. 27, Princeton, New Jersey, International Finance Section, Princeton University.
- Foreman-Peck, James (1983), A History of the World Economy: International Economic Relations since 1850, Sussex, Wheatsheaf Books.
- Gardener, Richard N. (1956), Sterling-Dollar Diplomacy, London, Oxford University Press.
- Gold, Joseph (1969), The Reform of the Fund, IMF Pamphlet Series, No. 12, Washington, D.C.
- \_\_\_\_\_ (1970), Special Drawing Rights, Characters and Use, IMF Pamphlet Series, No. 13, Washington, D.C.
- \_\_\_\_\_ (1971), Special Drawing Rights: The Role of Language, IMF Pamphlet Series, No. 15, Washington, D.C.
- \_\_\_\_\_ (1978), The Second Amendment of the Fund's Articles of Agreement, IMF Pamphlet Series, No. 25, Washington, D.C.
- \_\_\_\_\_ (1981), SDRs, Currencies, and Gold: Fifth Survey of New Legal Developments, IMF Pamphlet Series, No. 36, Washington, D.C.

- Grubel, Herbert G. (Ed.), (1963), World Monetary Reform, Stanford, Stanford University Press.
- \_\_\_\_\_ (1971), "The Demand for International Reserves: A Critical Review of Literature", Journal of Economic Literature, Vol. 9, pp. 1148-1166.
- Haberler, Gottfried (1971), "The Case Against the Link", in Chapter 10 of George M. Vonfurstenburg (Ed.), (1983), International Money and Credit: The Policy Roles, Washington, D.C.
- Hawkins, Robert G. (Ed.), (1965), A Compendium of Plans for International Monetary Reform, New York.
- Hawkins, Robert G., and C. Rangarajan (1970), "On Distribution of New International Reserves", Journal of Finance, Vol. 25, pp. 881-891.
- Heller, H. Robert (1968), "The Transaction Demand for International Means of Payment", Journal of Political Economy, Vol. 76, pp. 141-145.
- Hirsch, Fred (1971), "SDRs and the Working of the Gold Exchange Standard", International Monetary Fund Staff Papers, Vol. 18, pp. 221-253.
- International Monetary Fund (1965), Annual Report, Washington, D.C.
- \_\_\_\_\_ (1969), Annual Report, Washington, D.C.
- \_\_\_\_\_ (1970a), International Reserves, Needs and Availability, Papers and Proceedings of the Seminar at IMF, Washington, D.C.

- International Monetary Fund (1970b), Annual Report,  
Washington, D.C.
- \_\_\_\_\_ (1976), Proposed Second Amendment to the Articles  
of Agreement of The International Monetary Fund,  
Washington, D.C.
- \_\_\_\_\_ (1986), "Role of SDRs", IMF Survey, September,  
pp. 268-270.
- \_\_\_\_\_ (1987a), The Role of the SDR in the International  
Monetary System, Occasional Papers, No. 51,  
Washington, D.C.
- \_\_\_\_\_ (1987b), Annual Report, Washington, D.C.
- Johnson, Harry G. (1969), "Theoretical Problems of the  
International Monetary System", Pakistan Development  
Review, Vol. 7, pp. 1-28.
- \_\_\_\_\_ (1972), "The Link That Chains", Foreign Policy,  
Vol. 8, pp. 113-120.
- Kelly, Michael G. (1970), "The demand for International  
Reserves", American Economic Review, Vol. 60, pp.  
655-667.
- Kenen, Peter B. (1983a), "The SDR as a Means of Payment: A  
Comment on Coats", International Monetary Fund Staff  
Papers, Vol. 30, pp. 656-661.
- \_\_\_\_\_ (1983b), "The Use of SDR to Supplement or Substitute  
for Other Means of Finance"<sup>in</sup>, /George M. Vonfurstenburg  
(Ed.) (1983), International Money and Credit: The  
Policy Roles, Washington, D.C.



- Kenen, Peter B. and Elijor B. Yudin (1965), "The demand for International Reserves", Review of Economics and Statistics, Vol. 47, pp. 242-250.
- Keynes, John Maynard (1943), "Proposals for an International Clearing Union", in Herbert G. Grubel (Ed.) (1963), World Monetary Reform, Stanford, Stanford University Press.
- Killick, Tony (1984), The Quest for Stabilisation: The IMF and the Third World, London, Overseas Development Institute.
- Lomax, David F. (1983), "International Moneys and Monetary Arrangements in Private Markets", in George M. Vonfurstenburg (Ed.), (1983), International Money and Credit: The Policy Roles, Washington, D.C.
- Machlup, Fritz (1963), Plans for Reform of the International Monetary System, Special Papers in International Economics, No. 3, Princeton, New Jersey, International Finance Section, Princeton University.
- \_\_\_\_\_ (1964), International Payments, Debts and Gold, New York.
- \_\_\_\_\_ (1965), "The Cloak Room Rule of International Reserves: Reserve Creation and Reserve Transfer", Quarterly Journal of Economics, Vol. 79, pp. 337-355.
- Machlup, Fritz and Burton, G. Malkeil (Ed.) (1964), International Monetary Arrangements, Princeton.

- Maynard, Geoffrey (1973), "Special Drawing Rights and Development Aid", Journal of Development Studies, Vol. 9, pp. 518-543.
- Milner, Chris and David Greenway (1979), An Introduction to International Economics, London, Longman Group.
- Morgan, E.V. and A.D. Morgan (1977), "Gold or Paper", London, Institute of Economic Affairs.
- Ndegwa, D.N. (1979), SDRs: What are they? Kenya, Central Bank of Kenya.
- Polak, Jacques J. (1971), Some Reflections on the Nature of Special Drawing Rights, IMF Pamphlet Series, No. 16, Washington, D.C.
- \_\_\_\_\_ (1974), Valuation and Rates of Interest of the SDR, IMF Pamphlet Series, No. 18, Washington, D.C.
- \_\_\_\_\_ (1979), "The SDRs as a Basket of Currencies", International Monetary Fund Staff Papers, Vol. 26, pp. 627-653.
- \_\_\_\_\_ (1980), "Hope for Substitution Account May Lie in a Simpler Scheme embodied in IMF", IMF Survey, Vol. 40, pp. 337-339.
- Polak, Jacques J., and Robert A. Mundell (Ed.) (1976), The New International Monetary System, New York, Columbia University Press.
- Roosa, Robert V. (1963), "Assuring the Free World's Liquidity", in Herbert G. Grubel (Ed.) (1963), World Monetary Reform, Stanford, Stanford University Press.

- Rueff, J. (1967), Balance of Payments, London, Macmillan Press.
- Scammel, W.M. (1975), International Monetary Policy Bretton Woods and After, London, Macmillan.
- Solomon, Robert (1977), The International Monetary System 1945-1976, an Insider's View, New York, Harper and Row.
- Stamp, Maxwell (1958), "The Fund and the Future", Llyods Bank Review, No. 58.
- Triffin, Robert (1960), Gold and the Dollar Crisis, Connecticut, Yale University Press.
- UNCTAD (1981), United Nations Conference on Measures to Strengthen the SDR, Report to the Group of Twenty-four, New York.
- \_\_\_\_\_ (1984), United Nations Development Programme, Conference on North-South Cooperation, New York.
- Vonfurstenburg, George M. (Ed.) (1983), International Money and Credit: The Policy Roles, Washington, D.C.
- Walshe, Grahamme (1971), International Monetary Reform, London, Macmillan.
- Wee, Harman Vander (1987), Prosperity and Upheaval: The World Economy 1945-1985, England, Penguin Books Limited.
- Willet, Thomas D. (1980), International Liquidity Issues, American Enterprise Institute for Public Policy Research, Washington, D.C.

Williamson, John (1973), "International Liquidity, A Survey",  
Economic Journal, Vol. 83, pp. 685-746.  
\_\_\_\_\_ (1977), The Failure of World Monetary Reform, 1971-74,  
New York, New York University Press.