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Exchange and Trade Relations Department

The Formulation of Credit Ceilings and the Achievement  
of Balance of Payments Objectives 1/

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## I. Introduction and Summary

Financial adjustment programs supported by upper credit tranche stand-by and extended arrangements have included ceilings on various forms of domestic credit expansion as performance criteria in virtually all cases. 1/ Credit limits are viewed as the most effective instrument by which to monitor financial developments as they are associated with the implementation of policies and they are related directly to the achievement of the balance of payments objectives of Fund programs. 2/

In the environment within which financial programs supported by Fund arrangements are formulated--open economies with exchange rates that are not perfectly flexible--the nominal quantity of money adjusts to demand not only through changes in domestic credit but also through balance of payments surpluses and deficits; more specifically, the behavior of overall credit will have a direct impact on the balance of payments. Discrepancies between actual and desired real money balances can be accommodated through direct actions by the monetary authorities, through international flows, or through changes in the level of nominal GDP. "In this environment, the monetary authorities have no direct control over the total quantity of money but only over the part that is supplied internally through domestic credit expansion . . . ." 3/ Fund arrangements aim, therefore, at controlling domestic credit expansion to achieve certain monetary and balance of payments objectives. 4/

This paper has two main purposes. First it describes current practices in the formulation of credit ceilings in Fund arrangements, based on a review of upper credit tranche stand-by arrangements approved in the period 1979-83 and extended arrangements approved in the period 1975-1983. 5/ These practices are compared with those described in a

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1/ Credit ceilings have not been included in programs for countries that do not have their own independent monetary policies (e.g., Liberia, Panama).

2/ For a review of the literature in the area of the monetary approach to the balance of payments, see Jacob A. Frenkel and Harry G. Johnson, "The Monetary Approach to the Balance of Payments," George Allen and Unwin, 1976, and International Monetary Fund, "The Monetary Approach to The Balance of Payments," Washington, D.C., 1977.

3/ Manuel Guitian, "Credit Versus Money as an Instrument of Control," IMF Staff Papers, Vol. 20 (November 1973).

4/ Though not treated explicitly in this paper, it is important to note that an economic program's external objectives include not only changes in either net foreign assets of the monetary authorities or the banking system, but also the external current account balance and the size and maturity structure of external debt. Without such multiple objectives, achievement of the overall balance of payments objective might fail to lead to a more meaningful restructuring of the external position.

5/ The appendix of the paper presents detailed information concerning practices in the formulation of credit ceilings across area departments in the Fund and across stand-by and extended arrangements.

paper by R.C. Williams concerning stand-by programs approved in the period 1965-1970. 1/ On the basis of this comparison three general observations may be made. First, there has been a tendency toward broader coverage in the formulation of credit ceilings. During the 1960s there was a trend toward the inclusion of more domestic assets and liabilities in the definition of net assets subject to global ceilings. In recent years this trend intensified and was characterized by more frequent reliance upon banking system ceilings (and less frequent reliance upon central bank ceilings). Second, the use of subceilings on net credit to government has increased significantly. During the 1960s, subceilings were used in only one half of programs with central bank ceilings and in almost no programs with banking system ceilings. In recent years a separate ceiling has been placed on government operations in virtually all cases. Third, the use of adjustable credit ceilings has become more frequent.

The second purpose of the paper is to examine the role of credit ceilings in achieving monetary and balance of payments targets, paying particular attention to factors that influence control over monetary instruments. Changes in the stock of money result from either changes in net domestic assets or changes in net foreign assets of the banking system; thus, there is a strong relationship between the net domestic assets of the banking system and the overall balance of payments of the banking system for a given money stock. Narrow formulations of domestic credit ceilings may reduce the relationship that exists between compliance with credit ceilings and the achievement of balance of payments objectives. 2/ Indeed, the experience of stand-by arrangements approved in 1980-81 suggests that, as the coverage of domestic credit narrows, the relationship between observing credit ceilings and achieving balance of payments targets becomes less strong. In particular, the use of ceilings covering only the net domestic credit (which excludes "other items net") rather than the net domestic assets (which includes "other items net") of the banking system, significantly reduces the relationship between meeting credit ceilings and achieving balance of payments objectives. Regardless of which formulation of credit ceilings is used, however, an incorrect estimate of a country's demand for money may overshadow the relation between domestic credit expansion and the balance of payments outcome.

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1/ R.C. Williams, "Evolution of Alternative Forms of Credit Ceilings," DM/71/42, (5/26/71).

2/ This is not the case if the economic program also has a narrow definition of a balance of payments objective, e.g., net foreign assets of the central bank.

II. Practices in the Formulation of Credit Ceilings in Stand-By Arrangements Approved in 1979-83 and Extended Arrangements Approved in 1975-1983

This study covers 100 stand-by arrangements approved between 1979 and 1983 which supported 112 upper credit tranche economic programs. 1/ In general these arrangements covered a 12-month period containing only a single program year, although some arrangements were for longer periods, in a few instances extending to three years. 2/ The study also includes 35 extended arrangements that were approved between 1975 and 1983 that supported a total of 54 annual programs. 3/

Table 1. Summary of Stand-By and Extended Arrangements

	Stand-By Arrangements Approved in 1979-83	Extended Arrangements Approved in 1975-1983	Total
Number of arrangements	<u>100</u>	<u>35</u>	<u>135</u>
Number of programs	<u>112</u>	<u>54</u>	<u>166</u>
Ceiling on			
Central bank credit	31	22	53
Banking system credit	73	28	101
Bank credit to public sector only	8	4	12

Sources: Appendix Tables IIa and IIb.

Within these programs, credit expansion was controlled by ceilings on either the assets of the monetary authorities--a concept that encompasses the central bank and, at times, the monetary functions

1/ Fifty-four economic programs were approved in the African Department, 18 in the Asian Department, 15 in the European Department, 2 in the Middle Eastern Department, and 23 in the Western Hemisphere Department (Table 1 and Appendix Table Ia).

2/ An economic program is defined to be 18 or less months so that an arrangement of more than 18 months would be considered as more than one economic program.

3/ Fourteen programs were approved in the African Department, 9 in the Asian Department, 6 in the Middle Eastern Department, and 25 in the Western Hemisphere Department (Table 1, Appendix Table Ib).

of public and quasi-public entities--or the assets of the banking system. Among the 166 annual programs supported by stand-by and extended arrangements, 154 had a global ceiling on either the monetary authorities or banking system credit, while the remaining programs only had a ceiling on credit to the nonfinancial public sector (Appendix Tables IIa and IIb). <sup>1/</sup> As is evident from the Appendix Tables, the greater proportion of central bank credit ceilings in programs within extended arrangements is due to the large proportion of extended arrangements accounted for by members in the Western Hemisphere Department which employed, exclusively, global ceilings on central bank credit.

1. Central bank credit ceilings

a. Formulation

For a ceiling on central bank credit to be effective, a comprehensive concept of credit, incorporating both sides of the balance sheet, must be used because a reduction (increase) in the domestic liabilities of the monetary authorities has the same monetary effect as an expansion (reduction) in its domestic assets. As is illustrated in the hypothetical Balance Sheet I, the monetary consequences of an increase in loans by the monetary authorities to the public sector are the same as a reduction in public sector deposits with the monetary authorities. Similarly, the monetary effect of a loan to commercial banks is the same as a reduction in deposits by banks. To reflect these relationships, under current Fund practice, in general, ceilings are placed on a global concept of credit net of deposits. Similarly, subceilings are placed on the net (rather than gross) government position with respect to the monetary authorities.

Monetary Authorities

Balance Sheet I

Assets		Liabilities	
1. Foreign assets	200	5. Foreign liabilities	100
2. Loans to public sector	400	6. Deposits	250
3. Loans to private sector and banks	100	Public sector	(100)
4. Other items	100	Banks	(150)
	<u>800</u>	7. Currency	400
		8. Other items	<u>50</u>
			800

<sup>1/</sup> Programs only controlling credit to the public sector tended to be for small economies dominated by the public sector.

To monitor the behavior of monetary aggregates, ceilings on credit of the monetary authorities are formulated in Fund programs in two distinct manners--covering net domestic credit or net domestic assets. The net domestic credit approach selects specific domestic assets and domestic liabilities from the balance sheet of the monetary authorities, and a ceiling is placed on the sum of these values. <sup>1/</sup> Each item to be included within the ceiling must be defined precisely and strictly. The main argument for using this selective approach is that the specific assets and liabilities covered by the ceiling are selected based on institutional and economic factors relevant to the economy. In addition, items covered by the ceiling tend to be subject to greater control by the authorities than excluded items. However, domestic assets and liabilities not covered by the ceiling (including "other items net") could result in unintended domestic credit changes.

The second type of ceiling on credit of the monetary authorities--net domestic assets--is defined broadly as the difference between certain easily monitored entries, usually currency and net foreign assets. This method obviates the need for detailing the specific domestic assets and liabilities that are to be captured within the ceiling. Rather, only two readily identifiable items--currency and net foreign assets--must be defined. The main arguments for adopting this approach are that it is simple to monitor and that it eliminates the risk of changes in anything but liabilities to the private sector affecting the balance of payments outcome. All domestic assets and liabilities other than currency are captured by the ceiling as shown in Balance Sheet I above and, hence, for a given stock of currency, control over the net domestic assets of the monetary authorities automatically translates to control over the net foreign assets of the monetary authorities.

b. Recent experience with central bank credit ceilings

Table 2 provides information on the formulation of credit ceilings in stand-by arrangements approved between 1979 and 1983 and in extended arrangements approved between 1975 and 1983 (see Appendix Tables III, IIIa, and IIIb, for detailed information on central bank credit ceiling formulation). For programs with global ceilings on the monetary authority operations limits were placed on the central bank credit in 45 out of 53 cases; in the remaining cases, a somewhat broader concept of the monetary authorities was used reflecting the particular institutional features of the country. <sup>2/</sup> Also, in 50 out of 53 programs, the ceiling on

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<sup>1/</sup> Using this selective approach, a ceiling is placed on specified loans to the public and private sectors minus specified deposits by the public sector and deposits by the commercial banks with the monetary authorities and thus does not cover "other assets" or "other liabilities." Net other items include categories such as the capital and valuation accounts.

<sup>2/</sup> The monetary authorities have included the central bank and a quasi-public bank associated with the central bank.

credit of the monetary authorities was defined as net domestic assets using the residual approach--the difference between certain liabilities and net international reserves. In one of these programs using the residual approach net foreign assets were subtracted from the sum of net liabilities to private commercial banks and currency in order to measure net domestic assets. Thus net liabilities to private commercial banks were excluded from control under the ceiling. Finally, in three programs the net domestic credit approach was used (see Appendix Table IIIa).

Table 2. Summary of Central Bank and Banking System Credit Ceilings

	Economic Programs Supported by Stand-By Arrangements, 1979-83		Economic Programs Supported by Extended Arrangements, 1975-1983		Total of Stand-By and Extended Arrangements	
	Central bank	Banking system	Central bank	Banking system	Central bank	Banking system
Number of Fund programs <u>1/</u>	<u>31</u>	<u>73</u>	<u>22</u>	<u>28</u>	<u>53</u>	<u>101</u>
Net domestic asset ceiling <u>2/</u>	28	21	22	13	50	34
Net domestic credit ceiling <u>3/</u>	3	52	--	15	3	67

Sources: Appendix Tables III, IIIa, IIIb, IV, IVa, and IVb.

1/ Only includes the 104 economic programs supported by stand-by arrangements and the 50 programs supported by the extended arrangements that employed global ceilings.

2/ A ceiling on net domestic assets is defined in terms of the "residual approach" and covers "net other items."

3/ A ceiling on net domestic credit is defined in terms of the "selective approach" where "net other items" are excluded from the ceiling.

## 2. Banking system credit ceilings

### a. Formulation

Ceilings on total banking system credit are also formulated in two distinct ways--covering net domestic credit or net domestic assets. One selects specific domestic assets and liabilities to be included

within the credit ceiling, while the other is defined broadly as the difference between certain easily monitored entities, usually the liabilities to the private sector and the net foreign assets of the banking system. Referring to Balance Sheet II, a selective approach might, for example, include net public sector credit (credit to the

Banking System

Balance Sheet II 1/

Assets		Liabilities	
1. Foreign assets	400	5. Foreign liabilities	300
2. Credit to public sector	400	6. Deposits	500
3. Credit to private sector	300	Public sector	(100)
4. Other items	200	Private sector	(400)
	<u>1,300</u>	7. Currency outside banks	400
		8. Other items	<u>100</u>
			<u>1,300</u>

1/ Net foreign assets (1 - 5) plus net domestic credit (2 - 6a + 3) equals liabilities to the private sector or M2 (6b + 7) minus "net other items" (4 - 8).

public sector by the banking system minus public sector deposits with the banking system), as well as credit to the private sector by the banking system in the ceiling. In this example, the "other assets" and "other liabilities" would be excluded from coverage under the credit ceiling and the ceiling would be on the net domestic credit of the banking system. In contrast, the net domestic assets of the banking system could be defined through the residual approach as liabilities to the private sector minus net foreign assets: credit to the public sector, credit to the private sector, "other assets," public deposits, and "other liabilities" would all be covered within the net domestic asset ceiling of the banking system.

b. Recent experience with banking system ceilings

During the period under review, banking system ceilings were used in the 101 economic programs supported by stand-by and extended arrangements, of which 99 employed a single global ceiling with the remaining programs using one ceiling on credit to government and one on credit to the private sector (see Table 2 and Appendix Tables IV, IVa, and IVb for detailed information on banking system credit ceiling formulation). In

all cases, government deposits with the banking system were netted out from the domestic assets and, hence, were covered by the ceiling on net credit to the government from the banking system.

Prior to 1983, it was common for the global ceiling on banking system credit to exclude certain assets of the banking system in economic programs supported by stand-by arrangements. Between 1979 and 1982 there were 49 stand-by programs utilizing global ceilings on banking system credit, of which only 10 programs (20 percent) included net other items within the ceiling (a net domestic asset ceiling). However, of the 24 programs approved in 1983 which utilized banking system ceilings, credit ceilings in 11 programs (45 percent) included net other items within the performance test. In nine of these programs, all domestic assets and liabilities (other than liabilities to the private sector) were covered by the performance test.

With regard to programs under the extended facility, the coverage of credit ceilings was greater than in programs supported by stand-by arrangements. Between 1975-1983 there were 28 economic programs utilizing global ceilings on banking system credit, of which 13 (45 percent) were defined to cover the net domestic assets of the banking system. The higher proportion of economic programs supported by extended arrangements that used a net domestic asset ceiling was due to one particular area department that employed exclusively this practice (see Appendix Table IVb). In the remaining 15 programs supported by an extended arrangement, net other items were excluded from the coverage of the ceiling.

In total, 67 out of 101 economic programs employed a ceiling on the net domestic credit, rather than net domestic assets, of the banking system (Table 2). There may have been a tendency to exclude net other items from ceilings due to their quantitative insignificance, unpredictable behavior, or obscure direct relationship to real economic activity. However, net other items include the profit and loss, capital, and valuation accounts of the monetary authorities and deposit money banks. These accounts are of particular significance in an environment where the central bank is extending exchange or debt guarantees or when exchange rate movements are large and unpredictable. In such circumstances danger exists that, if excluded, large movements in net other items may significantly affect the availability of liquidity and, hence, the balance of payments objectives of a Fund program.

### 3. The use of credit subceilings

Subceilings on net credit to the public sector were used in all but five economic programs supported by stand-by arrangements in 1979-83 and in all programs under the extended facility (Tables 1 and 3 and Appendix Tables II, IIa, and IIb). These subceilings applied to credit to government or to the nonfinancial public sector although large variations existed across programs and area departments concerning the definition of these entities. The five programs for which no subceilings on public

Table 3. Subceilings on Credit to Public Sector

	Economic Programs Supported by Stand-By Arrangements 1979-83		Economic Programs Supported by Extended Arrangements 1979-83		Total of Stand-By and Extended Arrangements	
	<u>Global ceiling on</u>		<u>Global ceiling on</u>		<u>Global ceilings on</u>	
	Central bank	Banking system	Central bank	Banking system	Central bank	Banking system
Number of Fund programs	<u>31</u>	<u>73</u>	<u>22</u>	<u>28</u>	<u>53</u>	<u>101</u>
Credit subceiling <sup>1/</sup>						
Central Bank to government	4	3	--	--	4	3
Central Bank to public sector	9	--	5	--	14	--
Banking system to government	4	49	1	14	5	63
Banking system to public sector	12	10	14	8	26	18
Other	5	5	4	6	9	11

Sources: Appendix Tables III, IIIa, IIIb, IVa, and IVb.

<sup>1/</sup> May not add up to number of programs because of multiple subceilings or programs without subceilings.

sector credit were included reflected special institutional features of the members. In particular, as has been noted in a previous study, fiscal performance clauses were not used in countries "whose economic structures are such that the nongovernment sector has little or no access to bank credit [so that] developments in the financial accounts of the public sector usually can be monitored adequately through a single performance clause on overall bank credit." <sup>1/</sup> Optimally, it is desirable to provide the widest coverage with regard to credit and the fullest definition of the public sector as possible within a performance criterion for the public sector. Otherwise, if public sector entities not included in the subceiling are extended more credit than originally envisaged, the private sector is unlikely to have access to sufficient credit within the global credit ceiling to sustain the private sector economic activity that underlies the program's objectives. Also, the attainment of external objectives in most cases tends to depend directly on fiscal performance and, hence, the instrument for monitoring financial developments in the public sector should be as inclusive as possible. <sup>2/</sup> The importance of fiscal performance in achievement of external adjustment is derived from the simple identity between the external current account, the overall balance of the public sector and in the overall balance (that is the difference between private sector savings and investment) of the private sector.

Out of 53 programs with global central bank ceilings--all of which had subceilings on some concept of government borrowing--less than one fifth had subceilings covering only credit to government (in contrast to the overall nonfinancial public sector) and only one quarter included ceilings on credit from the central bank as opposed to ceilings on total bank credit. The narrowest coverage captured by credit subceilings was central bank credit to government, with the use of this type of subceiling reflecting, in part, poor data availability for public sector entities.

Out of the 101 programs with global banking system ceilings, subceilings were used in 67 out of the 73 programs supported by stand-by arrangements in 1979-83 and in all the programs under the extended facility. The stand-by programs which did not include credit subceilings usually were found in countries with nonmarket economies. The most commonly used subceiling was banking system net credit to government

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<sup>1/</sup> W.A. Beveridge and Margaret R. Kelly, "Fiscal Content of Programs Supported by Stand-By Arrangements in the Upper Credit Tranches, 1969-78," *IMF Staff Papers* (June 1980).

<sup>2/</sup> As discussed below, in some instances, the demand for money is highly unstable and overall banking system data is available only with a long time lag. In this situation, it might be difficult to rely on overall credit ceilings as the primary device to ensure balance of payments goals; rather, the monitoring of fiscal performance may be the best means of achieving balance of payments objectives.

(two-thirds of programs supported by stand-by arrangements and one-third of programs under the extended facility) and banking system net credit to the nonfinancial public sector (one-seventh of stand-by programs and almost one half of programs under the extended facility). The preponderance of banking system subceilings on government (rather than on the public sector) reflected poor data availability from commercial banks concerning the operations of the rest of the nonfinancial public sector. The coverage of these subceilings has tended to be broader for extended arrangements than for stand-by arrangements, with a relatively high proportion of extended programs using banking system subceilings on credit to the nonfinancial public sector and a relatively low proportion of extended arrangements using central bank subceilings or subceilings on credit to the government. This tendency may reflect the need to better monitor structural adjustments in the nonfinancial public sector during the period of an extended arrangement.

#### 4. Use of adjustable credit ceilings

Credit ceilings have at times included some form of automatic adjustment when there was substantial uncertainty as regards the behavior of a major exogenous economic variable at the beginning of the program period. This uncertainty may concern the magnitude or timing of a projected external flow. The use of adjustable credit ceilings may also be appropriate when the demand for money is difficult to predict due to external factors. With a view to achieving a balance of payments situation that is sustainable in the medium term, however, upward automatic adjustments have been used more sparingly in Fund programs than downward adjustments. An upward adjustment in allowable domestic credit expansion due to a foreign financing shortfall will, all else being equal, correspond to a weaker balance of payments situation relative to target. This accommodating monetary policy would not prompt the economy to adjust to the shortfall in foreign financing and would be possible only if sufficient international reserves were available. In contrast, an unaltered domestic credit expansion would result in an external current account balance with greater-than-programmed adjustment.

The automaticity of adjustable ceilings may reduce the need in Fund arrangements for frequent requests for waivers and modifications for small deviations from programs. This, in turn, may lessen the possibility of an interrupted Fund program aggravating the situation. However, one of the fundamental purposes of performance criteria is to trigger a joint policy review between the Fund and a member country if a breach of a performance criterion occurs as such a breach indicates, a priori, that the program is off track. A danger of automatically adjustable performance criteria is that the opportunity for these joint policy reviews may be reduced. This points to the need to limit the scope of factors for which automatic adjustment is possible.

As is evident from Appendix Tables V, Va, Vb, Vc, and Vd, slightly less than one third of programs supported by stand-by arrangements approved between 1979 and 1983, and one third of programs under the

extended facility up to the end of 1983 used some type of automatic adjustment to domestic credit ceilings. <sup>1/</sup> The most common type of adjustment was an automatic downward adjustment for excesses in net inflows of foreign capital as compared to programmed levels. Other less common reasons for adjustable ceilings included uncertainties concerning the timing and amount of debt rescheduling, the future price of an important export commodity, and profits from central bank intervention in a parallel exchange market. There has been an increasing tendency to use automatically adjustable credit ceilings (Appendix Tables Vb and Vd). Between 1975 and 1979 only one out of 14 programs under the extended facility utilized this type of adjustment. In contrast, one-third of extended programs included automatic adjustment mechanisms in 1980-81 and over one-half in 1982-83. Similarly, only one quarter of stand-by programs used automatic adjustments in 1979-81, while over one-third used them in 1982-83. This trend may reflect more frequent debt reschedulings, greater uncertainty concerning external flows, and the greater amount of credit covered within the formulation of credit ceilings in recent years.

### III. A Comparison of Current and Past Practices in the Formulation of Credit Ceilings

The formulation of credit ceilings in recent years has differed significantly from that in effect between 1965 and 1970. A large majority of programs approved between 1965 and 1970 included global ceilings on central bank credit; in contrast, a large majority of stand-by and extended arrangements covered by this study included global ceilings on banking system credit (Table 4). This trend toward greater coverage within credit ceilings, as exemplified by the movement toward banking system credit ceilings, is exhibited both by countries entering into Fund arrangements for the first time and by countries with a succession of Fund arrangements which initially had central bank ceilings and subsequently changed to banking system global credit ceilings. Moreover, this trend was evidenced even within the period under review, in that arrangements with many countries that relied on central bank global ceilings between 1979 and 1980 switched to banking system global credit ceilings between 1981 and 1983. By 1982-83, banking system global credit ceilings were used exclusively in many area departments unless not relevant for institutional reasons. For example, banking system credit is not subject to control in Liberia and Panama because they use the U.S. dollar as their currency.

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<sup>1/</sup> This does not include those cases which employed bands of domestic credit expansion; if credit exceeded the first limit consultation was triggered, and if the second was exceeded the program became inoperative.

Table 4. General Categories of Credit Ceilings

	Economic Programs Supported by Stand-By Arrangements		Economic Programs Supported by Extended Arrangements
	1965-1970	1979-83	1975-1983
	Number of Fund programs	128	112
Global central bank credit	81	31	22
Global banking system credit	31	73	28
Bank credit to public sector only	16	8	4

Sources: Appendix Tables II, IIa, IIb; and DM/71/42 (5/26/71).

Table 5 compares current and past practices in the formulation of central bank global credit ceilings. Out of the 81 economic programs which included global ceilings on central bank credit between 1965 and 1970, all domestic credit was covered in 58 cases while all domestic liabilities, except currency, were netted out in only 21 cases. This reflects the tendency in the 1960s to place ceilings on gross, rather than net, credit. However, there was a trend during this period to include more domestic liabilities of the central bank within the ceiling, and by 1970, it was not uncommon to place a ceiling on the net domestic assets of the central bank. In contrast, current practice is almost uniform--all domestic assets and liabilities (except currency) are covered in the ceiling on net domestic assets of the central bank.

Table 5. Ceilings on Central Bank Operations

	Economic Programs Supported by Stand-By Arrangements				Economic Programs Supported by Extended Arrangements	
	1965-1970	Per-cent- age	1979-1983	Per-cent- age	1975-1983	Per-cent- age
Number of Fund programs	81	100	31	100	22	100
All domestic assets covered	58	72	28	90	22	100
All domestic assets and liabilities except currency covered	21	26	28	90	22	100
Performance criterion on reserve requirements	31	38	4	13	--	--
Reserve deposits covered	28	35	30	97	22	100
No subceiling used <u>1/</u>	37	46	--	--	--	--

Sources: Appendix Tables II, IIa, IIb, IIIa, IIIb; and DM/71/42 (5/26/71).

1/ No subceiling employed in conjunction with a global ceiling.

Table 6 compares current and past practices in the formulation of global banking system credit ceilings. Out of a total of 31 programs which employed global credit ceilings on banking system credit between 1965 and 1970, government deposits with the banking system were netted out from credit to the government in 22 cases. In most cases where deposits with the banking system were not netted out, government deposits with the central bank (but not with commercial banks) were covered "largely reflecting the fact that the government did not hold deposits with commercial banks." 1/ However, it was rare for other domestic liabilities to be netted out from domestic assets, and in no cases were "net other items" included within the banking system ceiling. In contrast, for the 101 programs with banking system ceilings reviewed in this paper, government deposits with the banking system were netted from domestic assets of the banking system in all cases, and a ceiling was placed on the net domestic assets of the banking system in 34 out of the 101 programs. Recent arrangements, in contrast to those approved in earlier periods, have emphasized use of a broad mechanism by which to monitor financial developments in order to achieve program targets.

1/ R.C. Williams, "Evolution of Alternative Forms of Credit Ceilings," DM/71/42, (5/26/71).

Table 6. Ceilings on Banking System Credit

	Economic Programs Supported by Stand-By Arrangements				Economic Programs Supported by Extended Arrangements	
	Per-		Per-		Per-	
	1965- 1970	cent- age	1979- 1983	cent- age	1975- 1983	cent- age
Number of Fund programs	<u>31</u>	<u>100</u>	<u>73</u>	<u>100</u>	<u>28</u>	<u>100</u>
Government deposit of banking system covered	22	71	73	100	28	100
"Other items net" covered	--	--	21	28	13	46
No subceiling used <u>1/</u>	28	90	5	7	--	--

Sources: Appendix Tables II, IIa, IIb, IVa, IVb; and DM/71/42 (5/26/71).

1/ No subceiling used in conjunction with a global ceiling.

Tables 5 and 6 also compare current and past practices in the use of credit subceilings to the public sector. Current practice is to place subceilings on as broad a measure as possible of the public sector's credit--limited usually only by data availability. All programs with global central bank ceilings and all but five programs with global banking system ceilings approved during the period reviewed employed subceilings or targets on the overall deficit of the nonfinancial public sector deficit. The exceptions were mostly for centrally planned economies.

In contrast, almost one half of all programs with central bank global credit ceilings that were approved between 1965 and 1970 did not use subceilings on public sector credit, and in only a few cases was the subceiling extended beyond the central bank to include also commercial bank credit to government. Also, of the 31 programs approved between 1965 and 1970 that employed banking system credit ceilings, in 16 the credit ceiling was limited to bank credit to the government with no ceiling on total domestic credit. Only three of the programs with global ceilings employed credit subceilings to government; thus, over one third of programs using banking system credit had no separate limit on government use of credit.

IV. The Role of Credit Ceilings in the Achievement of Monetary and Balance of Payments Targets

1. Factors influencing control over monetary instruments

The use of a ceiling on central bank credit, rather than on that of the banking system, allows commercial banks to react, unconstrained by direct ceilings on their credit expansion, to the price signals of the market. In these circumstances, the flexibility and openness of the market place and the structure of the financial system are important factors influencing the decision as to the form of credit to control directly within credit ceilings. If a country's exchange rate and internal prices are allowed to react freely to demand and supply considerations and the economic system is not constrained by exchange and trade restrictions, commercial banks are able to act in an environment that promotes rational decision making. In such circumstances, the commercial banks should be allowed to react, unimpeded by restrictions, to the demands of the nonbank private sector. However, when these conditions do not hold, private sector demand for credit may appear rational but may be used for undertakings with rates of return that do not justify the cost of the funding. In such circumstances, the use of central bank credit ceilings, that place no constraint on commercial banking activity, may not be appropriate.

Within this context, central bank credit ceilings might be employed in a member country where control over commercial bank lending activity is indirect; e.g., where the most important instruments of control are the credit operations of the central bank and the reserve requirements of commercial banks. In such cases, the economic structure of the country may facilitate rational financial intermediation. In contrast, global ceilings on banking system credit might be used for member countries for which the main instrument of monetary control is quantitative limits on the credit operations of the commercial banks, where interest rates are not used for the rationing of credit, or where the commercial banks are state owned.

In addition to structural and institutional considerations, a variety of other factors play an important role in influencing the choice of credit ceilings; these include data availability, lags in the reporting of data, the perceived stability of the money supply multiplier and the demand for money, and past practices. The following discusses these as well as other factors influencing the choice of the formulation of credit ceilings.

a. Data availability

An advantage of placing ceilings on central bank, rather than banking system, credit is the availability of data within a reasonably short time lag. The lag between the test date of performance criteria in a Fund program and the time at which the member country is able to draw Fund resources is a reasonable proxy for the lag in the reporting of

data. As indicated in Table 7, the reporting lag between test date and drawing was up to one month for over 45 percent of all economic programs supported by stand-by and extended arrangements with central bank ceilings. Further, the lag was limited to only one and one-half months for 90 percent of all stand-by and extended programs with central bank ceilings. This lag is significantly larger when waiting for data from the entire banking system. The reporting lag was up to one month for only one third of all relevant programs under stand-by and extended arrangements, while only three quarters of programs with banking system ceilings had data available within one and one-half months after the applicable test date. This comparison may be biased toward minimizing the differences in lags between countries with central bank and banking system ceilings, as those programs using banking system ceilings may operate, on average, in countries with more comprehensive data reporting systems. As a country's reporting system becomes more reliable and efficient, placing ceilings on banking system credit becomes operationally more feasible.

Table 7. Comparison of Data Availability:  
Central Bank and Banking System Credit Ceilings

Reporting Lag Between Test Date and Drawing Date	Central Bank			Banking System		
	Programs under stand-by arrange- ments	Programs under extended arrange- ments	Total	Programs under stand-by arrange- ments	Programs under extended arrange- ments	Total
Total number of Fund programs	<u>31</u>	<u>22</u>	<u>53</u>	<u>73</u>	<u>28</u>	<u>101</u>
Up to one- half month	1	3	4	2	--	2
Up to one month	15	5	20	22	9	21
Up to one and one-half months	8	6	14	25	13	38
Up to two months	1	4	5	12	3	15
Greater than two months	--	--	--	7	3	10
Not applic- able <sup>1/</sup>	6	4	10	5	--	5

Sources: Appendix Tables IIIa, IIIb, IVa, and IVb.

<sup>1/</sup> Test dates and drawing dates are set in sliding manner.

b. Money supply multiplier

In order for control over central bank credit to translate into control over expansion of banking system credit, a stable or predictable relationship is required between growth of base money (currency in circulation and the reserves of commercial banks held with the central bank) and growth of broader monetary aggregates. This relationship can be represented by the money supply multiplier. <sup>1/</sup> By examining the factors that determine this relationship, the necessary conditions for control of central bank credit to translate into control over the supply of banking system credit become apparent.

One instrument which the monetary authorities can control that affects the relationship between base and broad money is the reserve requirement. When commercial banks' required reserves are lowered, demand deposits could potentially increase for a given quantity of bank reserves. If the expansion of demand deposits were permanent, this would imply a decreased ratio of reserves, time deposits, and currency to the public's bank deposits and would be concomitant with a larger amount of banking system credit relative to base money. Unless these lower rates are offset by a more than proportionate increase in the demand for broad money, the public's incremental demand for bank deposits might be translated into demand for foreign goods and unanticipated balance of payments outflows.

One crucial aspect in this scenario is the behavior of currency held by the public. Any unanticipated decline in the ratio of currency to demand deposits would result in a larger-than-intended expansion of banking system relative to central bank credit. As a result, the net domestic asset ceiling of the central bank may be met in an economic program while the targets for net domestic assets and the overall balance of payments of the banking system are not achieved. Furthermore, an incorrect estimate of the demand for currency may interfere with the positive relationship between the achievement of a central bank net international reserves target and adherence to a ceiling on central bank net domestic assets. If the demand for currency is lower than projected, the amount of central bank net domestic asset expansion consistent with the programmed net international reserves of the central bank is smaller than anticipated. As a result, the net domestic asset ceiling of the central bank might be met while the central bank net

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<sup>1/</sup> A simplified version of the multiplier is:

$$m = \frac{1 + k}{(r + e)(1 + t) + k}$$

where, k = currency held by public/public's bank deposits, r = required reserves/public's bank deposits, e = excess reserves/public's bank deposits, and t = time deposits/public's bank deposits.

international reserve target is not achieved. <sup>1/</sup> Shifts in the public's desire to hold currency might occur on account of either economic or structural factors and must be accounted for in any programming exercise using a central bank credit ceiling.

Although it is not possible to control the public's demand for currency, Fund programs could control reserve requirements (though not excess reserves) through a performance clause or by an understanding of such practices as stated in the letter of intent between the Fund and the member country. Control might also be gained by including reserve deposits within the global credit ceilings on the central bank. Any factors influencing the reserve ratio might be compensated for by other components within the ceiling so that net domestic central bank credit would not be affected. Current practice in stand-by and extended arrangements has been to place commercial bank deposits with the central bank within the global ceiling on net credit of the central bank but *not to control directly these bank deposits*. This was the case in 27 out of 31 economic programs supported by stand-by arrangements and in all programs under the extended facility. In addition, almost one half of programs under stand-by and extended arrangements which used central bank credit ceilings either placed a performance criterion on reserve requirements or, more often, made mention of policy on reserve requirements in the letter of intent. In contrast, less than one quarter of programs supported by stand-by and extended arrangements, which employed banking system credit ceilings, mentioned policy concerning reserve requirements in the letter of intent.

c. The demand for money

The relationship between the real and monetary sectors of an economy can be specified through the identification of the velocity ratio or its inverse, the money/income ratio. Within this framework, the amount of net domestic banking system credit expansion consistent with predicted national income and the desired change in net foreign assets can be estimated. A larger or smaller expansion of bank credit will be consistent with a particular change in net foreign assets and

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<sup>1/</sup> This is evident from the identity  $NDA_{CB} = C - NIR_{CB}$  (see Balance Sheet I). If C is projected to rise by 5 then a ceiling on  $NDA_{CB}$  of 2 would be consistent with an increase in  $NIR_{CB}$  of 3. If C actually rises by 4 then meeting the  $NDA_{CB}$  ceiling would be consistent with an increase in  $NIR_{CB}$  of only 2.

national income for a lower or higher velocity ratio. <sup>1/</sup> Thus, in any programming exercise, it is crucial that an estimate of an economy's demand for money take into account all relevant economic variables. Correspondingly, it is crucial that economic policy instruments such as the exchange rate and interest rates be set so as to be consistent with the desired demand for money.

The use of central bank and banking system ceilings can be compared within this context. For an economic program with a ceiling on net domestic assets of the banking system, if actual and projected velocity ratios are equivalent, compliance with the credit ceiling will likely result in achievement of the balance of payments target, while an overshoot of the ceiling will lead to a weaker than programmed balance of payments performance. Also, if an unanticipated increase (decrease) in velocity occurs, and net domestic credit is extended to the limit of the ceiling, the balance of payments outcome will be worse (better) than targeted. In contrast, an additional factor comes into play when an economic program uses a ceiling on the net domestic assets of the central bank and the economic program targets not only the net foreign assets of the central bank, but also the overall balance of payments outcome of the banking system. In this case, if there are changes in the currency/deposit ratio or the other ratios that affect the relationship between base and broad money (as described above) such changes will alter the relationship between base and broad money and, hence, between base money and the balance of payments outcome of the banking system. Changes in the determinants in the relationship between base and broad money may aid or hinder the achievement of an overall balance of payments objective depending upon whether the actual velocity ratio is greater than, less than, or equal to that predicted. In any event, if an economic program uses a central bank credit ceiling, and the determinants of the money multiplier are not stable, the programming exercise may be more probabilistic than if a banking system credit ceiling is utilized.

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<sup>1/</sup> Liquidity financing can be described as the unanticipated amount of domestic credit expansion required to be consistent with the programmed net foreign asset and national income targets. If the actual and projected velocity ratios are equivalent, then liquidity financing is zero, while if the actual velocity ratio is larger (smaller) than projected, then liquidity financing is negative (positive) and, hence, the amount of bank credit expansion consistent with targeted net foreign assets and national income is smaller (larger) than programmed. In other words, if the demand for money is lower (higher) than projected, then the amount of bank credit expansion consistent with programmed net foreign assets and national income is smaller (larger) than programmed. See E. Brau, "The Variability of Velocity and Credit Ceilings," IMF Staff Papers, Vol. XVII, No. 3 (1970) for a fuller description.

d. Unanticipated capital flows

A special problem that can influence the desirability of employing a particular type of credit ceiling is the inflow of unanticipated capital to the private sector (that is not covered by most external debt ceilings in Fund programs). If commercial banks attract capital from abroad in larger quantities than anticipated and use it for extending credit to domestic borrowers, then (with an unchanged demand for money), a ceiling on the net domestic assets of the central bank could be more expansionary than one on the credit of the banking system. In a program using a ceiling on domestic credit of the banking system, the allowable expansion of domestic credit by the banking system would be unaffected by the increased capital inflow (unless the ceiling is adjustable automatically for unplanned capital flows). If the commercial bank attempts to extend additional credit, the authorities would be obliged to take measures to control the expansion of credit. In contrast, in a program using a ceiling on the net domestic assets of the central bank, the authorities would not be obliged to take offsetting measures to control the expansion of total domestic credit. Under these circumstances, the likely balance of payments outcome in a program using a central bank credit ceiling would be worse than in one using a banking system ceiling, unless the increased supply of domestic credit was accompanied by increased demand for money. A ceiling on the net domestic assets of the central bank may also be more expansionary if the central bank intervenes and acquires the foreign exchange from the commercial bank.

e. Balance of payments tests

In order to compensate for the possibility of projecting, incorrectly, the demand for currency when using central bank credit ceilings, it is possible to combine such central bank ceilings with a performance criterion on movements in official net international reserves. Thus, any expansion in currency less than programmed, for a given expansion in central bank net domestic assets, would not result in weaker than targeted net official international reserves. The use of a balance of payments test in this context would be intended to secure a particular balance of payments outcome rather than to monitor exchange rate policy. Evidence points to its use quite frequently as a performance criterion in programs with central bank credit ceilings. Out of 53 economic programs supported by stand-by and extended arrangements with ceilings on central bank operations, 27 had a performance criterion on the net official international reserves outcome (Appendix Tables IIIa and IIIb). In contrast, out of the 101 programs supported by stand-by and extended arrangements that used banking system credit ceilings, only 5 put a performance test on the balance of payments outcome (Appendix Tables IVa and IVb).

2. Some experience with credit ceilings in achieving monetary and balance of payments targets

This section of the paper reviews the experience of economic programs supported by stand-by arrangements approved in 1980 and 1981 in an attempt to identify factors that have influenced the relationship between credit ceilings and success in achieving balance of payments objectives. Within the monetary framework presented in this paper, there is an exact correspondence between the net domestic assets and the net foreign assets of the banking system for a given stock of money. As narrower formulations of banking system domestic credit are covered within a performance criterion in a Fund program, e.g., a ceiling on net domestic credit (excluding "other items net" from coverage) rather than on net domestic assets, this relationship becomes potentially less strong. There is also an exact correspondence between the net domestic assets and the net official international reserves of the central bank, for a given stock of currency. However, the correspondence between the net domestic assets of the central bank and the net foreign assets of the banking system depends upon the stability of the relationship between base and broad money. Indeed, as indicated in Figures 1 and 2, narrower definitions of banking system domestic credit have been associated with a less certain relationship between credit performance and achievement of balance of payments objectives, and adherence to a ceiling on central bank net domestic assets has not always led to the achievement of overall balance of payments objectives.

Figure 1 demonstrates the experience of the five countries (represented by A - E) with seven economic programs supported by stand-by arrangements that employed global ceilings on central bank credit in 1980 and 1981 (as indicated in Figure 1, country A and country D had economic programs in 1980 and 1981). <sup>1/</sup> The top panel shows the correspondence between observing the central bank net domestic asset ceiling and achieving the targeted expansion of net domestic assets of the banking system. The bottom panel shows the correspondence between observing the central bank net domestic asset ceiling and achieving the balance of payments target as defined in the countries' <sup>2/</sup>

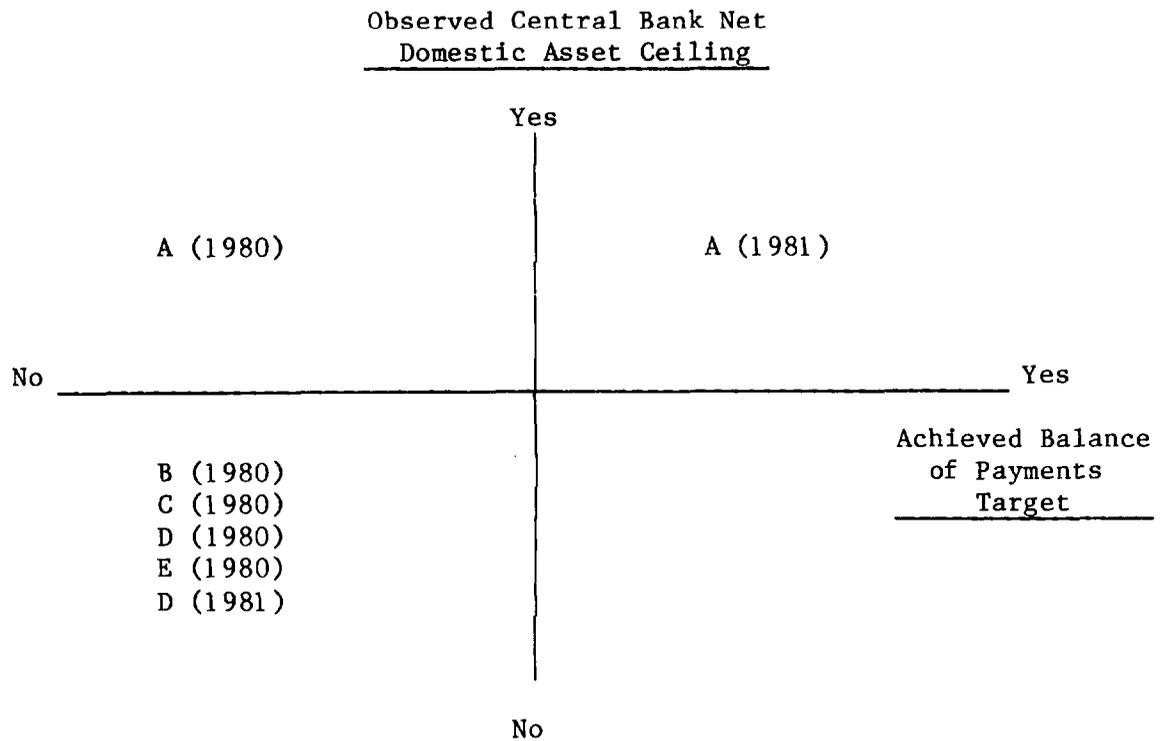
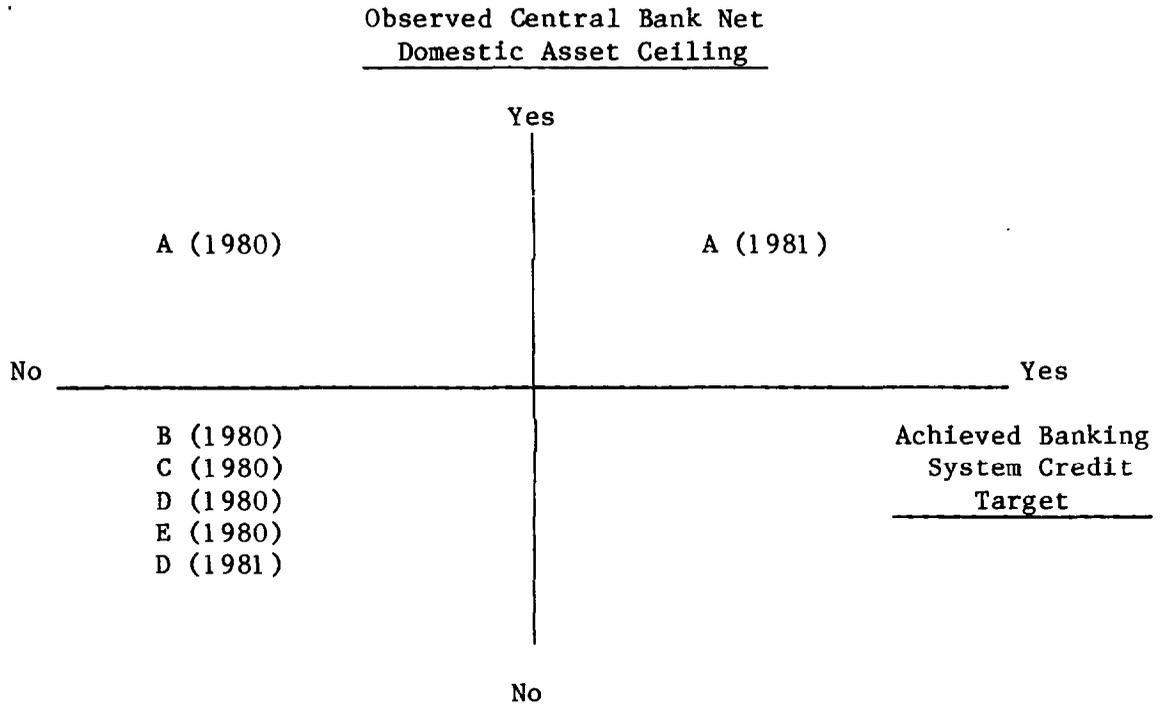
Regarding the top panel in Figure 1, in six out of the seven economic programs (arrangements represented in the upper right and lower left quadrants), there was direct correspondence between central bank and banking system credit, indicating a stable or predictable money supply multiplier; in five of these cases (arrangements represented in the lower left quadrant) the central bank credit ceiling was breached

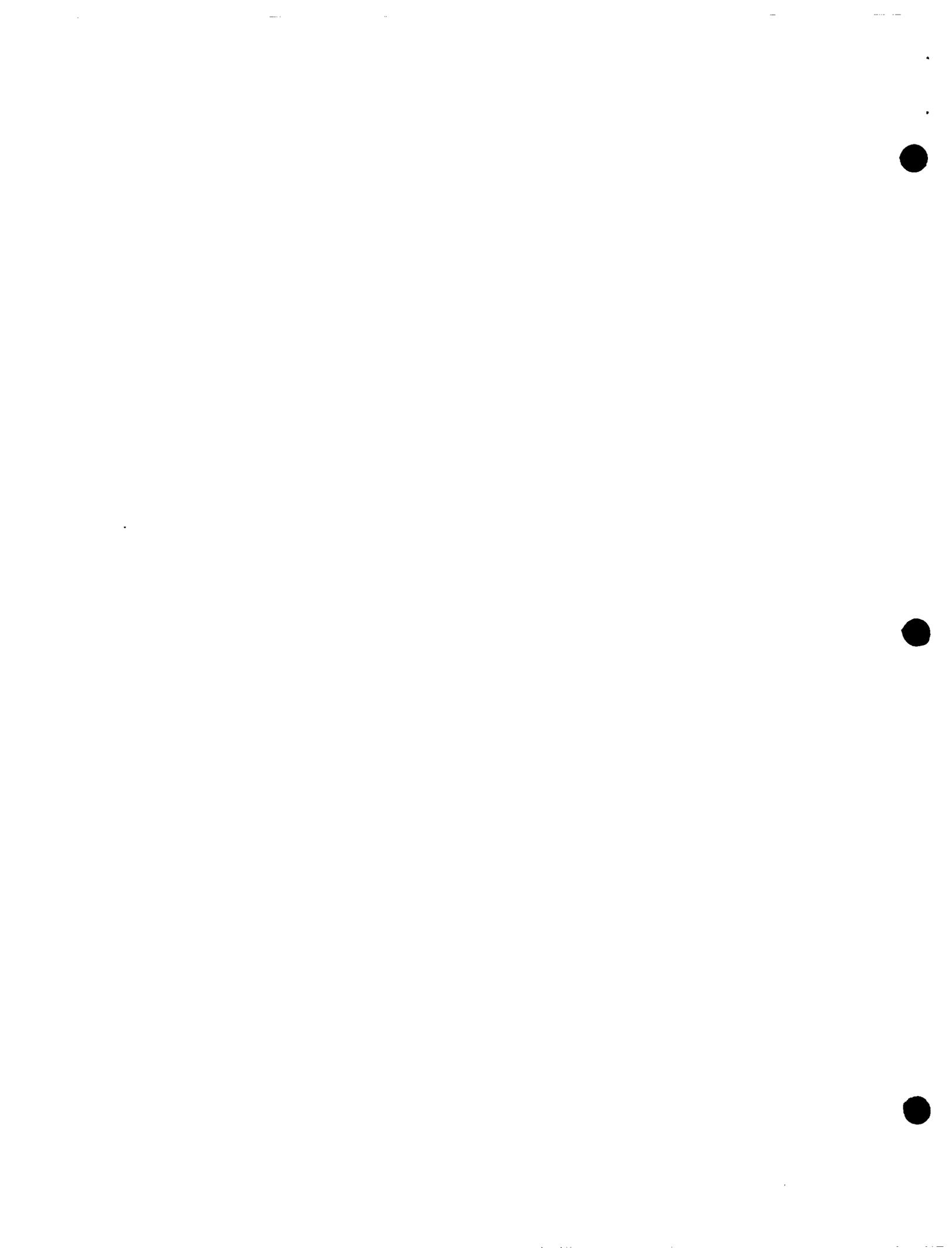
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<sup>1/</sup> Two programs with Liberia are not included due to institutional reasons.

<sup>2/</sup> When the country's economic program explicitly targets the banking system's overall balance of payments then this definition is used, otherwise, the targeted central bank net foreign asset target is used.

Figure 1. Central Bank Net Domestic Asset Ceiling and Balance of Payments Objectives for Programs with Countries A-E





with a correspondingly higher-than-targeted growth in banking system credit, while in one case (arrangement represented in the upper right quadrant) the expansion of central bank credit was within the ceiling and the expansion of banking system credit was within the targeted amount. However, in one economic program (A (1980)), the central bank net domestic asset ceiling was observed, but the expansion of banking system credit greatly exceeded the targeted amount.

Regarding the lower panel in Figure 1, in each of the six programs in which there was a direct correspondence between central bank and banking system credit, there was also the expected relationship between the central bank credit ceiling and the overall balance of payments target; thus, only one of the programs achieved the balance of payments objective. However, in one stand-by program (A (1980)), despite observance of the performance criterion on the net domestic assets of the central bank, the target on the overall balance of payments was not achieved (lower panel). In this case, the economic program incorrectly predicted the money multiplier and, hence, the relationship between central bank and banking system credit (time deposits rose more quickly than demand deposits and, with the former carrying a lower reserve requirement, broad money growth accelerated above target). As a result, ceilings on domestic credit were observed while the overall balance of payments target was not achieved.

Figure 2 demonstrates the experience of 19 countries (represented by C and F-W) that had 25 economic programs supported by stand-by arrangements employing ceilings on banking system credit in 1980 and 1981 (several countries had economic programs in both years). The top panel shows the correspondence between observing the performance criterion on either the net domestic assets or the net domestic credit of the banking system and achieving the overall balance of payments objective. <sup>1/</sup> The bottom panel adjusts, when applicable, banking system credit to a net domestic asset of the banking system (by including other items into the definition of net domestic credit) in order to demonstrate the relationship between the net domestic assets and the overall balance of payments of the banking system across all 25 economic programs.

As demonstrated in the top panel, before adjusting uniformly to a net domestic asset concept, there are seven cases in which the anticipated relationship between domestic credit and the balance of payments objective does not occur; in five economic programs supported by stand-by arrangements (represented in the upper left quadrant) the domestic credit ceiling is observed but the balance of payments objective is not met, and in two programs supported by stand-by arrangements (represented in the lower right quadrant) the balance of payments objective is achieved despite excessive expansion of domestic credit. As demonstrated in

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<sup>1/</sup> Defined as net domestic credit or net domestic assets, depending on formulation of credit ceiling used in the stand-by arrangement.

the bottom panel, after adjusting to a net domestic asset concept by including "other items net" within the ceiling, there are only four cases in which the anticipated relationship between domestic credit and the balance of payments objective does not occur. The improvement in the correspondence between changes in domestic credit and the balance of payments objective is due to formulating the credit ceiling in order to broaden its coverage to include "other items net" as these items were important factors in influencing balance of payments objectives. In the four remaining programs (for countries G, J, S, and W), the anticipated relationship between net domestic assets and the overall balance of payments objective does not occur due to an ex post demand for money that is significantly different from the ex ante projection.

#### V. Conclusion

This study has reviewed 112 economic programs under stand-by arrangements (1979-83) and 54 programs under the extended facility (1975-1983) approved by the Executive Board of the Fund in recent years. Practices in the formulation of credit ceilings within these programs have evolved from those used during previous decades. During the recent period there has been a clear trend toward a comprehensive coverage of credit by performance clauses. In addition to global credit ceilings, a subceiling on credit to government is now used in most programs as a means to distribute explicitly the required external adjustment between the private and public sectors. The trend toward more comprehensive coverage of credit by performance clauses that was already noted in a previous study by R.C. Williams has accelerated in recent years and has occurred in a wide variety of circumstances and member countries. In several recent arrangements banking system credit ceilings were employed where central bank ceilings were used in the past while, at the same time, indirect, market-oriented methods of controlling credit were implemented. This movement has taken place despite such drawbacks as the greater data requirements necessitated when monitoring commercial bank activity.

Many factors influence an economic program's success or failure in achieving a desired balance of payments outcome. Achievement of a balance of payments target depends crucially on an accurate estimate of a country's demand for currency or money because the balance of payments outcome can differ from that desired (despite observance of credit ceilings) depending on the deviation of actual from predicted currency or money demand. In this context, it is important that economic policies in place be consistent with the ex ante estimate of a country's demand for money if credit policy is to assist in the achievement of balance of payments objectives. Given an accurate estimate of demand for currency, the targeted central bank net international reserve outcome is likely to be achieved if a ceiling on central bank net domestic assets is observed. Similarly, a correct estimate of the demand for money helps to ensure that the targeted banking system net foreign asset outcome is achieved if a banking system net domestic asset ceiling is observed. However,

Figure 2. Banking System Credit Ceilings and Balance of Payments Objectives for Programs with Countries C and F-W

Observed Banking System Credit Ceiling a/

		Yes			
	F (1980)	I (1980)	G (1981)	R (1981)	
	G (1980) <u>1/</u>	L (1980)	S (1981) <u>2/</u>	V (1981)	
	H (1981)	H (1980)	T (1981)	P (1981)	
	I (1981)	P (1980)	C (1981)		
	J (1981) <u>1/</u>	Q (1981)	U (1981)		
No					Yes
	K (1980)		W (1980)		Achieved Balance of Payments <u>Objectives</u>
	L (1981)		W (1981) <u>2/</u>		
	M (1981) <u>3/</u>				
	N (1981) <u>3/</u>				
	O (1981)				
		No			

Observed Banking System Net Domestic Asset Ceiling b/

		Yes			
	G (1980) <u>1/</u>	I (1980)	Q (1981)	P (1981)	
	J (1981) <u>1/</u>	L (1980)	R (1981)	P (1980)	
		H (1980)	G (1981)	C (1981)	
		T (1981)	W (1980)		
		U (1981)	V (1981)		
No					Yes
	F (1980)	L (1981)			Achieved Balance of Payments <u>Objectives</u>
	K (1980)	N (1981) <u>3/</u>			
	I (1981)	H (1981)	W (1981) <u>2/</u>		
	O (1980)	M (1981) <u>3/</u>	S (1981) <u>2/</u>		
		No			

a/ Defined as net domestic credit or net domestic assets, depending on formulation of credit ceiling in stand-by programs.

b/ When applicable, credit ceiling reformulated to net domestic assets.

1/ Actual demand for money significantly less than programmed.

2/ Actual demand for money significantly greater than programmed.

3/ Adjusted for accumulation of external arrears.



even with a correct estimate of the demand for money, the likelihood of achieving a banking system net foreign asset objective is reduced if a credit ceiling covers only central bank net domestic assets or banking system net domestic credit. In the former case (i.e., a ceiling on net domestic assets of the central bank) the targeted net domestic assets of the banking system and net foreign assets of the banking system may not be achieved, even if the ceiling on net domestic assets of the central bank is observed if there is an unstable relationship between base money and broad money. In the latter case (i.e., a ceiling on net domestic credit of the banking system), movements in "other items net" may result in a larger than programmed expansion of credit and thus the balance of payments objective may not be met even if the program ceiling is observed.

Thirty-two economic programs supported by stand-by arrangements approved in 1980 and 1981 were studied to examine the relationship between the formulation of credit ceilings and the achievement of balance of payments objectives. The expected relationship between credit ceilings and balance of payments targets did not hold in 8 out of the 32 cases. In 4 cases this relationship did not hold due to an incorrect specification of money demand. In one program, which included a ceiling on central bank credit, the overall balance of payments target was not met despite observance of the ceiling as the money multiplier was incorrectly projected. In the remaining 3 cases, which employed ceilings on banking system credit, the break in the desired relationship between credit and the overall balance of payments was due to an expansion of credit in the form of "other items net" significantly larger than programmed. In general, the use of central bank credit ceilings in an economic program may be appropriate due to the structural, institutional, or economic circumstances of a country. However, when an economic program employs global ceilings on banking system credit, a ceiling on net domestic assets, rather than net domestic credit, is a preferred formulation if one is to accurately achieve balance of payments objectives.

Table Ia. Stand-By Programs Surveyed, 1979-83

	1979	1980	1981	1982	1983
<b>African Department</b>					
Central African Republic	--	--	April	--	April
Congo	April	--	--	--	--
Equatorial Guinea	--	July	--	--	--
Ethiopia	--	--	May	--	--
The Gambia	--	--	--	February	--
Ghana	January	--	--	--	August
Guinea	--	--	--	December	--
Kenya	August	October	--	January	March
Liberia	--	September	August	September	October
Madagascar	--	June	April	July	December
Malawi	October	May	May	August	--
Mali	--	--	--	May	November
Mauritania	--	July	June	--	--
Mauritius	October	September	December	--	May
Morocco	--	--	--	April	September
Niger	--	--	--	--	October
Senegal	--	--	September	November	September
Sierra Leone	November	--	--	--	--
Somalia	--	February	July	July	--
Tanzania	--	September	--	--	--
Togo	June	--	February	--	March
Uganda	--	--	June	August	September
Zaire	August	--	--	--	December
Zambia	--	--	--	--	April
Zimbabwe	--	--	--	--	May
<b>Asian Department</b>					
Bangladesh	July	--	--	--	March
Burma	--	--	June	--	--
Korea	--	March	February	--	July
Lao, P.D.R.	--	August	--	--	--
Philippines	June	February	January	--	March
Solomon Islands	--	--	May	--	June
Sri Lanka	--	--	--	--	--
Thailand	--	--	June	November	June
Western Samoa	August	--	--	--	September
<b>European Department</b>					
Hungary	--	--	--	December	--
Portugal	--	--	--	--	October
Romania	--	--	June	June	March
South Africa	--	--	--	November	--
Turkey	July	June	September	June	June
Yugoslavia	--	June	January	January	March
<b>Middle Eastern Department</b>					
Sudan	--	--	--	February	January
<b>Western Hemisphere Department</b>					
Argentina	--	--	--	--	January
Barbados	--	--	--	October	May
Bolivia	--	February	--	--	--
Chile	--	--	--	--	January
Costa Rica	--	March	--	December	--
Ecuador	--	--	--	--	July
El Salvador	--	--	--	July	--
Grenada	--	--	May	--	--
Guatemala	--	--	--	--	September
Haiti	--	--	--	August	November
Honduras	--	--	--	November	--
Nicaragua	May	--	--	--	--
Panama	March	April	February	April	June
Peru	July	February	--	--	--
Uruguay	--	--	--	--	April

Source: Executive Board documents.

Table Ib. Programs Under the Extended Facility Surveyed, 1975-1983

	1975	1976	1977	1978	1979	1980	1981	1982	1983
<b>African Department</b>									
Gabon	--	--	--	--	--	June	January	February	--
Kenya	June	--	--	--	--	--	--	--	--
Ivory Coast	--	--	--	--	--	--	February	February	February
Malawi	--	--	--	--	--	--	--	--	September
Morocco	--	--	--	--	--	October	March	--	--
Senegal	--	--	--	--	--	August	--	--	--
Sierra Leone	--	--	--	--	--	--	March	--	--
Zaire	--	--	--	--	--	--	June	--	--
Zambia	--	--	--	--	--	--	July	--	--
<b>Asian Department</b>									
Bangladesh	--	--	--	--	--	December	--	--	--
India	--	--	--	--	--	--	November	November	November
Philippines	--	April	April	--	--	--	--	--	--
Sri Lanka	--	--	--	--	January	January	January	--	--
<b>European Department</b>									
<b>Middle Eastern Department</b>									
Egypt	--	--	--	July	--	--	--	--	--
Pakistan	--	--	--	--	--	November	December	December	--
Sudan	--	--	--	--	May	May	--	--	--
<b>Western Hemisphere Department</b>									
Brazil	--	--	--	--	--	--	--	--	February
Costa Rica	--	--	--	--	--	--	June	--	--
Dominica	--	--	--	--	--	--	February	February	August
Dominican Republic	--	--	--	--	--	--	--	--	August
Grenada	--	--	--	--	--	--	--	--	January
Guyana	--	--	--	--	June	June	July	--	--
Haiti	--	--	--	October	--	October	--	--	--
Honduras	--	--	--	--	July	--	January	--	--
Jamaica	--	--	--	June	June	--	April	April	April
Mexico	--	--	January	January	January	--	--	--	January
Peru	--	--	--	--	--	--	--	June	June

Source: Executive Board documents.

Table II. Summary of Central Bank and Banking System Credit Ceilings

	Stand-By Arrangements, 1979-83		Extended Arrangements, 1975-1983	
	Central bank	Banking system	Central bank	Banking system
Total number of Fund programs <u>1/</u>	31	73	22	28
Net domestic asset ceiling <u>2/</u>	28	21	22	13
Net domestic credit ceiling <u>3/</u>	3	52	--	15
Africa				
Number of programs	8	44	1	13
Net domestic asset ceiling <u>2/</u>	5	8	1	4
Net domestic credit ceiling <u>3/</u>	3	36	--	9
Asia				
Number of programs	--	18	--	9
Net domestic asset ceiling <u>2/</u>	--	7	--	3
Net domestic credit ceiling <u>3/</u>	--	11	--	6
Europe				
Number of programs	6	9	--	--
Net domestic asset ceiling <u>2/</u>	6	4	--	--
Net domestic credit ceiling <u>3/</u>	--	5	--	--
Middle East				
Number of programs	--	2	--	6
Net domestic asset ceiling <u>2/</u>	--	2	--	6
Net domestic credit ceiling <u>3/</u>	--	--	--	--
Western Hemisphere				
Number of programs	17	--	21	--
Net domestic asset ceiling <u>2/</u>	17	--	21	--
Net domestic credit ceiling <u>3/</u>	--	--	--	--

Source: Executive Board documents.

1/ Only includes the 104 stand-by programs and 50 extended programs with global ceilings.

2/ A ceiling on net domestic assets is defined in terms of the "residual approach" and covering "net other items."

3/ A ceiling on net domestic credit is defined in terms of the "selective approach" where "net other items" are excluded from the ceiling.

Table IIa. General Categories of Credit Ceilings, 1979-83 <sup>1/</sup>

## Stand-By Arrangements

	1979	1980	1981	1982	1983	1979- 83
<b>African Department</b>						
Number of stand-by programs	<u>8</u>	<u>9</u>	<u>11</u>	<u>11</u>	<u>15</u>	<u>54</u>
Central bank credit	<u>2</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>8</u>
Banking system credit	6	5	9	10	14	44
Separate ceiling or subceiling						
on government or public sector	(8)	(9)	(11)	(11)	(13)	(52)
Bank credit to public sector only	--	2	--	--	--	2
<b>Asian Department</b>						
Number of stand-by programs	<u>3</u>	<u>3</u>	<u>5</u>	<u>1</u>	<u>6</u>	<u>18</u>
Central bank credit	--	--	--	--	--	--
Banking system credit	3	3	5	1	6	18
Separate ceiling or subceiling						
on government or public sector	(3)	(2)	(4)	(1)	(6)	(16)
Bank credit to public sector only	--	--	--	--	--	--
<b>European Department</b>						
Number of stand-by programs	<u>1</u>	<u>2</u>	<u>3</u>	<u>5</u>	<u>4</u>	<u>15</u>
Central bank credit	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>6</u>
Banking system credit	--	1	2	3	3	9
Separate ceiling or subceiling						
on government or public sector	(1)	(2)	(2)	(4)	(3)	(12)
Bank credit to public sector only	--	--	--	--	--	--
<b>Middle Eastern Department</b>						
Number of stand-by programs	--	--	--	<u>1</u>	<u>1</u>	<u>2</u>
Central bank credit	--	--	--	<u>1</u>	<u>1</u>	<u>2</u>
Banking system credit	--	--	--	1	1	2
Separate ceiling or subceiling						
on government or public sector	(--)	(--)	(--)	(1)	(1)	(2)
Bank credit to public sector only	--	--	--	--	--	--
<b>Western Hemisphere Department</b>						
Number of stand-by programs	<u>3</u>	<u>4</u>	<u>2</u>	<u>6</u>	<u>8</u>	<u>23</u>
Central bank credit	<u>2</u>	<u>3</u>	<u>--</u>	<u>5</u>	<u>7</u>	<u>17</u>
Banking system credit	--	--	--	--	--	--
Separate ceiling or subceiling						
on government or public sector	(3)	(4)	(2)	(6)	(8)	(23)
Bank credit to public sector only	1	1	2	1	1	6
<b>All areas</b>						
Number of stand-by programs	<u>15</u>	<u>18</u>	<u>21</u>	<u>24</u>	<u>34</u>	<u>112</u>
Central bank credit	<u>5</u>	<u>6</u>	<u>3</u>	<u>8</u>	<u>9</u>	<u>31</u>
Banking system credit	9	9	16	15	24	73
Separate ceiling or subceiling						
on government or public sector	(15)	(17)	(19)	(23)	(33)	(107)
Bank credit to public sector only	1	3	2	1	1	8

Source: Executive Board documents.

<sup>1/</sup> Stand-by arrangements in upper credit tranches.

Table IIb. General Categories of Credit Ceilings, 1975-1983 1/

## Extended Arrangements

	1975	1976	1977	1978	1979	1980	1981	1982	1983	Total
<b>African Department</b>										
Number of extended programs	$\frac{1}{1}$	—	—	—	—	$\frac{3}{3}$	$\frac{6}{6}$	$\frac{2}{2}$	$\frac{2}{2}$	$\frac{14}{14}$
Central bank credit	$\frac{1}{1}$	—	—	—	—	—	—	—	—	$\frac{1}{1}$
Banking system credit	—	—	—	—	—	3	6	2	2	13
Separate ceiling or subceiling on government or public sector	(1)	(—)	(—)	(—)	(—)	(3)	(6)	(2)	(2)	(14)
Bank credit to public sector only	—	—	—	—	—	—	—	—	—	—
<b>Asian Department</b>										
Number of extended programs	—	$\frac{1}{1}$	$\frac{1}{1}$	—	$\frac{1}{1}$	$\frac{2}{2}$	$\frac{2}{2}$	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{9}{9}$
Central bank credit	—	$\frac{1}{1}$	$\frac{1}{1}$	—	$\frac{1}{1}$	—	—	—	—	$\frac{9}{9}$
Banking system credit	—	1	1	—	1	2	2	1	1	9
Separate ceiling or subceiling on government or public sector	(—)	(1)	(1)	(—)	(1)	(2)	(2)	(1)	(1)	(9)
Bank credit to public sector only	—	—	—	—	—	—	—	—	—	—
<b>European Department</b>										
	—	—	—	—	—	—	—	—	—	—
<b>Middle Eastern Department</b>										
Number of extended programs	—	—	—	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{2}{2}$	$\frac{1}{1}$	$\frac{1}{1}$	—	$\frac{6}{6}$
Central bank credit	—	—	—	—	—	—	—	—	—	—
Banking system credit	—	—	—	1	1	2	1	1	—	6
Separate ceiling or subceiling on government or public sector	(—)	(—)	(—)	(1)	(1)	(2)	(1)	(1)	(—)	(6)
Bank credit to public sector only	—	—	—	—	—	—	—	—	—	—
<b>Western Hemisphere Department</b>										
Number of extended programs	—	—	$\frac{1}{1}$	$\frac{3}{3}$	$\frac{4}{4}$	$\frac{2}{2}$	$\frac{5}{5}$	$\frac{3}{3}$	$\frac{7}{7}$	$\frac{25}{25}$
Central bank credit	—	—	$\frac{1}{1}$	$\frac{3}{3}$	$\frac{4}{4}$	$\frac{2}{2}$	$\frac{5}{5}$	$\frac{3}{3}$	$\frac{7}{7}$	$\frac{25}{25}$
Banking system credit	—	—	—	—	—	—	—	—	—	—
Separate ceiling or subceiling on government or public sector	(—)	(—)	(1)	(3)	(4)	(2)	(5)	(3)	(7)	(25)
Bank credit to public sector only	—	—	—	—	—	—	1	1	2	4
<b>All areas</b>										
Number of extended programs	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{2}{2}$	$\frac{4}{4}$	$\frac{6}{6}$	$\frac{9}{9}$	$\frac{14}{14}$	$\frac{7}{7}$	$\frac{10}{10}$	$\frac{54}{54}$
Central bank credit	$\frac{1}{1}$	—	$\frac{1}{1}$	$\frac{3}{3}$	$\frac{4}{4}$	$\frac{2}{2}$	$\frac{4}{4}$	$\frac{2}{2}$	$\frac{5}{5}$	$\frac{22}{22}$
Banking system credit	—	1	1	1	2	7	9	4	3	28
Separate ceiling or subceiling on government or public sector	(1)	(1)	(2)	(4)	(6)	(9)	(14)	(7)	(10)	(54)
Bank credit to public sector only	—	—	—	—	—	—	1	1	2	4

Source: Executive Board documents.

Table IIc. General Categories of Credit Ceilings

	Stand-By Arrangements		Extended Arrangements
	1965-70	1979-83	1975-1983
Total number of Fund programs	128	112	54
Global central bank credit	81	31	22
Global banking system credit	31	73	28
Bank credit to public sector only	16	8	4
Africa			
Number of Fund programs	<u>43</u>	<u>54</u>	<u>14</u>
Global central bank credit	14	8	1
Global banking system credit	15	44	13
Bank credit to public sector only	14	2	--
Asia			
Number of Fund programs	<u>14</u>	<u>18</u>	<u>9</u>
Global central bank credit	12	--	--
Global banking system credit	2	18	9
Bank credit to public sector only	--	--	--
Europe			
Number of Fund programs	<u>12</u>	<u>15</u>	<u>--</u>
Global central bank credit	6	6	--
Global banking system credit	6	9	--
Bank credit to public sector only	--	--	--
Middle East			
Number of Fund programs	<u>8</u>	<u>2</u>	<u>6</u>
Global central bank credit	--	--	--
Global banking system credit	8	2	6
Bank credit to public sector only	--	--	--
Western Hemisphere			
Number of Fund programs	<u>51</u>	<u>23</u>	<u>25</u>
Global central bank credit	49	17	21
Global banking system credit	--	--	--
Bank credit to public sector only	2	6	4

Source: Executive Board documents.

Table III. Ceilings on Central Bank Operations

	Stand-By Arrangements				Extended Arrangements	
	1965-70	Per-cent- age	1979-83	Per-cent- age	1975-1983	Per-cent- age
Number of Fund programs	81	100	31	100	22	100
All domestic assets covered	58	72	28	90	22	100
All domestic assets and liabilities except currency covered	21	26	28	90	22	100
Performance criterion on reserve requirements	31	38	4	13	--	--
Reserve deposits covered	28	35	30	97	22	100
No subceiling used <sup>1/</sup>	37	46	--	--	--	--
<b>Africa</b>						
Number of programs	14	17	8	26	1	5
All domestic assets covered	8		5		1	
All domestic assets and liabilities except currency covered	--		5		1	
Performance criterion on reserve requirements	2		--		--	
Reserve deposits covered	2		7		1	
No subceiling used <sup>1/</sup>	6		--		--	
<b>Asia</b>						
Number of programs	12	15	--	--	--	--
All domestic assets covered	6		--		--	
All domestic assets and liabilities except currency covered	--		--		--	
Performance criterion on reserve requirements	9		--		--	
Reserve deposits covered	--		--		--	
No subceiling used <sup>1/</sup>	4		--		--	
<b>Europe</b>						
Number of programs	6	8	6	19	--	--
All domestic assets covered	6		6		--	
All domestic assets and liabilities except currency covered	--		6		--	
Performance criterion on reserve requirements	1		4		--	
Reserve deposits covered	2		6		--	
No subceiling used <sup>1/</sup>	4		--		--	
<b>Western Hemisphere</b>						
Number of programs	49	60	17	55	21	95
All domestic assets covered	38		17		21	
All domestic assets and liabilities except currency covered	21		17		21	
Performance criterion on reserve requirements	19		--		--	
Reserve deposits covered	24		17		21	
No subceiling used <sup>1/</sup>	23		--		--	

Source: Executive Board documents.

<sup>1/</sup> No subceiling employed in conjunction with a global ceiling.

Table IIIa. Ceilings on Central Bank Operations, 1979-83

## Stand-By Arrangements

	Total: All Regions					1979-
	1979	1980	1981	1982	1983	83
Total number of stand-by programs	<u>5</u>	<u>6</u>	<u>3</u>	<u>8</u>	<u>9</u>	<u>31</u>
Type of coverage						
Central bank	5	6	3	7	7	28
Monetary authorities	--	--	--	1	2	3
Definition of coverage						
Currency issue minus net foreign assets	4	5	2	8	9	28
Specified domestic assets minus specified domestic liabilities <u>1/</u>	1	1	1	--	--	3
Use of credit subceilings	<u>5</u>	<u>6</u>	<u>3</u>	<u>9</u>	<u>11</u>	<u>34</u>
Net central bank credit to government	--	1	2	1	--	4
Net central bank credit to public sector	2	2	1	2	2	9
Net banking system credit to government	2	1	--	--	1	4
Net banking system credit to public sector	1	2	--	5	4	12
Deficit of public sector	--	--	--	1	4	5
Secondary credit policy						
Performance criterion on reserve requirements	--	1	1	1	1	4
Credit policy on reserve requirements stated in letter of intent	1	2	2	4	4	13
Reserve deposits captured (netted out) by global credit ceiling	4	6	3	8	9	30
Balance of payments test	1	2	1	3	4	11
Data reporting lag between test date and drawing						
Up to one-half month	--	--	--	--	1	1
Up to one month	3	3	1	4	4	15
Up to one- and one-half months	1	2	2	2	1	8
Up to two months	--	--	--	--	1	1
Not applicable <u>2/</u>	1	1	--	2	2	6

1/ In all cases excludes specified assets and only covers government deposits on the liability side.

2/ Set in a sliding manner.

Table IIIa (continued). Ceilings on Central Bank Operations, 1979-83

## Stand-By Arrangements

	African Department					1979-
	1979	1980	1981	1982	1983	1983
Total number of stand-by programs	<u>2</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>8</u>
Type of coverage						
Central bank	2	2	2	1	1	8
Monetary authorities	--	--	--	--	--	--
Definition of coverage						
Currency issue minus net foreign assets	1	1	1	1	1	5
Specified domestic assets minus specified domestic liabilities	1	1	1	--	--	3
Use of credit subceilings	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>10</u>
Net central bank credit to government	--	1	2	1	--	4
Net central bank credit to public sector	--	--	--	1	--	1
Net banking system credit to government	2	1	--	--	1	4
Net banking system credit to public sector	--	--	--	--	1	1
Secondary credit policy						
Performance criterion or reserve requirements	--	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	--	1	1	1	1	4
Reserve deposits captured by global credit ceiling	1	2	2	1	1	7
Balance of payments test	--	--	1	1	--	2
Data reporting lag between test date and drawing						
Up to one-half month	--	--	--	--	1	1
Up to one month	1	1	--	1	--	3
Up to one- and one-half months	--	--	2	--	--	2
Not applicable <u>1/</u>	1	1	--	--	--	2

1/ Set in a sliding manner.

Table IIIa (continued). Ceilings on Central Bank Operations, 1979-83

## Stand-By Arrangements

	European Department					1979-
	1979	1980	1981	1982	1983	1983
Total number of stand-by programs	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	1	<u>6</u>
Type of coverage						
Central bank	1	1	1	2	1	6
Monetary authorities	--	--	--	--	--	--
Definition of coverage						
Currency issue minus net foreign assets	1	1	1	2	1	6
Specified domestic assets minus minus specified domestic liabilities	--	--	--	--	--	--
Use of credit subceilings	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>6</u>
Net central bank credit to public sector	1	1	1	1	1	5
Net banking system credit to public sector	--	--	--	1	--	1
Secondary credit policy						
Performance criterion or reserve requirements	--	1	1	1	1	4
Credit policy on reserve require- ments stated in letter of intent	1	1	1	1	1	5
Reserve deposits captured by global credit ceiling	1	1	1	2	1	6
Balance of payments test	--	--	--	--	--	--
Data reporting lag between test date and drawing						
Up to one month	1	1	1	1	1	5
Up to one- and one-half months	--	--	--	1	--	1

Table IIIa (concluded). Ceilings on Central Bank Operations, 1979-83

## Stand-By Arrangements

	Western Hemisphere Department					
	1979	1980	1981	1982	1983	1979-83
Total number of stand-by programs	<u>2</u>	<u>3</u>	--	<u>5</u>	<u>7</u>	<u>17</u>
Type of coverage						
Central bank	2	3	--	4	5	14
Monetary authorities	--	--	--	1	2	3
Definition of coverage						
Currency issue minus net foreign assets	2	3	--	5	7	17
Specified domestic assets minus specified domestic liabilities	--	--	--	--	--	--
Use of credit subceilings	<u>2</u>	<u>3</u>	--	<u>5</u>	<u>9</u>	<u>19</u>
Net central bank credit to public sector	1	1	--	--	1	3
Net banking system credit to public sector	1	2	--	4	4	11
Deficit of public sector	--	--	--	1	4	5
Secondary credit policy						
Performance criterion on reserve requirements	--	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	--	--	--	2	2	4
Reserve deposits captured by global credit ceiling	2	3	--	5	7	17
Balance of payments test	1	2	--	2	4	9
Data reporting lag between test date and drawing						
Up to one month	1	1	--	2	3	7
Up to one- and one-half months	1	2	--	1	1	5
Up to two months	--	--	--	--	1	1
Not applicable <u>1/</u>	--	--	--	2	2	4

Source: Executive Board Documents.

1/ Set in a sliding manner.

Table IIIb. Global Ceilings on Central Bank Operations, 1975-1983

## Extended Arrangements

	African Department, Western Hemisphere Department, and Totals of All Regions									
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1975-1983
Total number of extended programs	<u>1</u>	--	<u>1</u>	<u>3</u>	<u>4</u>	<u>2</u>	<u>4</u>	<u>2</u>	<u>5</u>	<u>22</u>
Central bank or monetary authorities										
Central bank	1	--	1	3	4	1	4	1	2	17
Monetary authorities	--	--	--	--	--	1	--	1	3	5
Definition of coverage										
Currency issue minus net foreign assets	1	--	1	3	4	2	4	2	5	22
Specified domestic assets minus specified domestic liabilities	--	--	--	--	--	--	--	--	--	--
Use of credit subceilings	<u>1</u>	--	<u>1</u>	<u>3</u>	<u>4</u>	<u>3</u>	<u>5</u>	<u>2</u>	<u>5</u>	<u>24</u>
Net central bank credit to public sector	--	--	--	1	--	1	1	--	2	5
Net banking system credit to public sector	--	--	--	1	3	1	3	2	3	13
Deficit of public sector	--	--	1	1	1	1	1	--	--	5
Net banking system credit to government	1	--	--	--	--	--	--	--	--	1
Secondary credit policy										
Performance criterion on reserve requirements	--	--	--	--	--	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	--	--	1	--	--	1	1	2	3	8
Reserve deposits captured by global credit ceiling	1	--	1	3	4	2	4	2	5	22
Balance of payments test	--	--	1	2	1	1	4	2	5	16
Data reporting lag between test date and drawing										
Up to one-half month	--	--	--	1	--	--	--	1	1	3
Up to one month	--	--	--	1	1	1	1	--	1	5
Up to one- and one-half months	--	--	1	1	1	--	1	1	1	6
Up to two months	--	--	--	--	--	1	1	--	2	4
Not applicable <sup>1/</sup>	1	--	--	--	2	--	1	--	--	4

Source: Executive Board documents.

<sup>1/</sup> Set in sliding manner.

Table IV. Ceilings on Banking System Credit

	Stand-By Arrangements				Extended Arrangements	
	1965- 70	Per- cent- age	1979- 83	Per- cent- age	1975-1983	Per- cent- age
Total number of Fund programs	<u>31</u>	<u>100</u>	<u>73</u>	<u>100</u>	<u>28</u>	<u>100</u>
Government deposit of						
banking system covered	22	71	73	100	28	100
"Other items net" covered	--	--	21	29	13	46
No subceiling used <u>1/</u>	28	90	5	7	--	--
Africa						
Number of programs	<u>15</u>	<u>48</u>	<u>44</u>	<u>60</u>	<u>13</u>	<u>46</u>
Government deposit of						
banking system covered	11		44		13	
"Other items net" covered	--		8		4	
No subceiling used <u>1/</u>	15		--		--	
Asia						
Number of programs	<u>2</u>	<u>7</u>	<u>18</u>	<u>25</u>	<u>9</u>	<u>30</u>
Government deposit of						
banking system covered	1		18		9	
"Other items net" covered	--		7		3	
No subceiling used <u>1/</u>	1		2		--	
Europe						
Number of programs	<u>6</u>	<u>19</u>	<u>9</u>	<u>12</u>	<u>--</u>	<u>--</u>
Government deposit of						
banking system covered	6		9		--	
"Other items net" covered	--		4		--	
No subceiling used <u>1/</u>	4		3		--	
Middle East						
Number of programs	<u>8</u>	<u>26</u>	<u>2</u>	<u>3</u>	<u>6</u>	<u>22</u>
Government deposit of						
banking system covered	4		2		6	
"Other items net" covered	--		2		6	
No subceiling used <u>1/</u>	8		--		--	

Source: Executive Board documents.

1/ No subceiling used in conjunction with a global ceiling.

Table IVa. Global Ceiling on Banking System Credit, 1979-83

## Stand-By Arrangements

	All Areas					1979-
	1979	1980	1981	1982	1983	83
Total number of stand-by programs	<u>9</u>	<u>9</u>	<u>16</u>	<u>15</u>	<u>24</u>	<u>73</u>
Type of credit ceilings						
One ceiling on banking system	9	9	16	14	23	71
Simultaneous ceiling on banking system credit to government and on banking system credit to private sector	--	--	--	1	1	2
Coverage of domestic assets and liabilities						
All domestic assets covered	3	--	1	2	9	15
Net other items not covered	5	8	14	12	13	52
Net other items covered but specified assets or liabilities excluded	1	1	1	1	2	6
Coverage of government deposits netted out, banking system	9	9	16	15	24	73
Credit subceilings	<u>9</u>	<u>8</u>	<u>14</u>	<u>13</u>	<u>23</u>	<u>67</u>
Net banking system credit to government	6	5	11	12	15	49
Net banking system credit to public sector	1	2	2	--	5	10
Net central bank credit to government	--	1	--	1	1	3
Net banking system credit to government and gross banking system credit to public enterprises	2	--	--	--	1	3
Gross central bank credit to government	--	--	1	--	--	1
Deficit to public sector	--	--	--	--	1	1
Secondary credit policy						
Performance criterion on reserve requirements	--	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	2	2	--	1	5	10
Balance of payments test	--	--	--	2	1	3
Lag between test dates						
Up to one-half month	--	--	--	--	2	2
Up to one month	5	2	6	3	6	22
Up to one- and one-half months	1	2	7	6	9	25
Up to two months	2	3	2	3	2	12
More than two months	1	--	--	2	4	7
Not applicable <sup>1/</sup>	--	2	1	1	1	5

<sup>1/</sup> Set in a sliding manner.

Table IVa (continued). Global Ceiling on Banking System Credit, 1979-83

## Stand-By Arrangements

	African Department					1979- 83
	1979	1980	1981	1982	1983	
Total number of stand-by programs	<u>6</u>	<u>5</u>	<u>9</u>	<u>10</u>	<u>14</u>	<u>44</u>
Type of credit ceilings						
One ceiling on banking system	6	5	9	9	13	42
Simultaneous ceiling on banking system credit to government and on banking system credit to private sector	--	--	--	1	1	2
Coverage of domestic assets and liabilities						
All domestic assets covered	3	--	--	--	2	5
Net other items not covered	3	5	9	9	10	36
Net other items covered but specified assets or liabilities excluded	--	--	--	1	2	3
Coverage of government deposits						
Netted out, banking system	6	5	9	10	14	44
Credit subceilings	<u>6</u>	<u>5</u>	<u>9</u>	<u>9</u>	<u>14</u>	<u>43</u>
Net banking system credit to government	6	5	9	9	13	42
Deficit of public sector	--	--	--	--	1	1
Secondary credit policy						
Performance criteria on reserve requirements	--	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	1	2	--	1	2	6
Balance of payments test	--	--	--	2	--	2
Lag between test dates						
Up to one-half month	--	--	--	--	2	2
Up to one month	3	3	2	2	1	11
Up to one- and one-half months	--	--	5	4	4	13
Up to two months	2	2	1	1	2	8
More than two months	1	--	--	2	4	7
Not applicable <u>1/</u>	--	2	1	1	1	5

1/ Set in a sliding manner.

Table IVa (continued). Global Ceiling on Banking System Credit, 1979-83

## Stand-By Arrangements

	Asian Department					1979- 83
	1979	1980	1981	1982	1983	
Total number of stand-by programs	<u>3</u>	<u>3</u>	<u>5</u>	<u>1</u>	<u>6</u>	<u>18</u>
Type of credit ceilings						
One ceiling on banking system	3	3	5	1	6	18
Coverage of domestic assets and liabilities						
All domestic assets covered	--	--	--	--	4	4
Net other items not covered	2	2	4	1	2	11
Net other items covered but specified assets or liabilities excluded	1	1	1	--	--	3
Coverage of government deposits netted out, banking system	3	3	5	1	6	18
Credit subceilings	<u>3</u>	<u>2</u>	<u>4</u>	<u>1</u>	<u>6</u>	<u>16</u>
Net banking system credit to public sector	1	2	2	--	4	9
Net banking system credit to government and gross banking system credit to public enterprises	2	--	--	--	1	3
Net banking system credit to government	--	--	2	1	1	4
Secondary credit policy						
Performance criteria on reserve requirements	--	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	1	--	--	--	2	3
Balance of payments test	--	1	--	--	--	1
Lag between test dates						
Up to one month	2	1	4	--	4	11
Up to one- and one-half months	1	1	--	--	2	4
Up to two months	--	1	1	1	--	3

Table IVa (continued). Global Ceiling on Banking System Credit, 1979-83

## Stand-By Arrangements

	European Department					1979- 83
	1979	1980	1981	1982	1983	
Total number of stand-by programs	--	<u>1</u>	<u>2</u>	<u>3</u>	<u>3</u>	<u>9</u>
Type of credit ceilings						
One ceiling on banking system	--	1	2	3	3	9
Coverage of domestic assets and liabilities						
All domestic assets covered	--	--	1	1	2	4
Net other item not covered	--	1	1	2	1	5
Coverage of government deposits						
Netted out, banking system	--	1	2	3	3	9
Credit subceilings	--	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>6</u>
Net central bank credit to government	--	1	--	1	1	3
Gross central bank credit to government	--	--	1	--	--	1
Net banking system credit to government	--	--	--	1	--	1
Net banking system to public sector	--	--	--	--	1	1
Secondary credit policy						
Performance criteria on reserve requirements	--	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	--	--	--	--	1	1
Balance of payments test	--	1	2	1	1	5
Lag between test dates						
Up to one month	--	--	--	1	1	2
Up to one- and one-half months	--	1	2	2	2	7

Table IVa (concluded). Global Ceiling on Banking System Credit, 1979-83  
Stand-By Arrangements

	Middle Eastern Department					1979-
	1979	1980	1981	1982	1983	83
Total number of stand-by programs	--	--	--	<u>1</u>	<u>1</u>	<u>2</u>
Type of credit ceilings						
One ceiling on banking system	--	--	--	1	1	2
Coverage of domestic assets and liabilities						
All domestic assets covered	--	--	--	1	1	2
Coverage of government deposits						
Netted out, banking system	--	--	--	1	1	2
Credit subceilings						
Net banking system credit to government	--	--	--	<u>1</u>	<u>1</u>	<u>2</u>
Net banking system credit to public sector	--	--	--	--	1	1
Secondary credit policy						
Performance criteria on reserve requirements	--	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	--	--	--	--	--	--
Balance of payments test	--	--	--	--	--	--
Lag between test dates						
Up to one- and one-half months	--	--	--	--	1	1
Up to two months	--	--	--	1	--	1

Source: Executive Board documents.

Table IVb. Global Ceiling on Banking System Credit, 1976-1983

Extended Arrangements

	Total								1976-1983
	1976	1977	1978	1979	1980	1981	1982	1983	
Total number of programs under extended arrangements	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>7</u>	<u>9</u>	<u>4</u>	<u>3</u>	<u>28</u>
Type of credit ceilings									
One ceiling credit banking system	1	1	1	2	7	9	4	3	28
Coverage of domestic assets and liabilities									
All domestic assets covered	--	--	1	1	2	1	2	1	8
Net other item not covered	1	1	--	--	4	6	2	1	15
Net other item covered but specified assets and liabilities excluded	--	--	--	1	1	2	--	1	5
Coverage of government deposits netted out, banking system	1	1	1	2	7	9	4	3	28
Credit subceilings	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>7</u>	<u>9</u>	<u>4</u>	<u>3</u>	<u>28</u>
Net banking system credit to public sector	1	1	1	--	3	1	--	1	8
Net banking system credit to government and gross banking system credit to public enterprises	--	--	--	--	--	--	1	1	2
Net banking system credit to government	--	--	--	1	2	7	3	1	14
Net banking system credit to government and some public sector enterprises	--	--	--	1	1	--	--	--	2
Net banking system credit to government and some private enterprises	--	--	--	--	1	--	--	--	1
Net banking system credit to government and net central bank to some public enterprises	--	--	--	--	--	1	--	--	1
Secondary credit policy									
Performance criteria on reserve requirements	--	--	--	--	--	1	--	--	1
Credit policy on reserve requirements stated in letter of intent	--	--	--	1	--	6	1	--	8
Balance of payments test	1	1	--	--	--	--	--	--	2
Lag between test dates									
Up to one month	--	--	--	1	2	3	1	2	9
Up to one- and one-half months	--	--	1	1	4	4	3	--	13
Up to two months	--	1	--	--	1	1	--	--	3
More than two months	1	--	--	--	--	1	--	1	3

Table IVb (continued). Global Ceiling on Banking System Credit, 1980-83

## Extended Arrangements

	African Department				
	1980	1981	1982	1983	1980-83
Total number of programs under extended arrangements	<u>3</u>	<u>6</u>	<u>2</u>	<u>2</u>	<u>13</u>
Type of credit ceilings					
One ceiling banking system	3	6	2	2	13
Coverage of domestic assets					
All domestic assets covered	--	--	1	1	2
Net other item not covered	3	5	1	--	9
Net other item covered but specified assets excluded	--	1	--	1	2
Coverage of government deposits					
Netted out, banking system	3	6	2	2	13
Credit subceilings	<u>3</u>	<u>5</u>	<u>2</u>	<u>2</u>	<u>12</u>
Net banking system credit to public sector	2	1	--	1	4
Net banking system credit to government and gross banking system to public enterprises	--	--	1	1	2
Net banking system credit to government	1	4	1	--	6
Net banking system credit to government and net central bank to some public enterprises	--	1	--	--	1
Secondary credit policy					
Performance criteria on reserve requirements	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	--	5	--	--	5
Balance of payments test	--	--	--	--	--
Lag between test dates					
Up to one month	1	2	1	1	5
Up to one- and one-half months	2	2	1	--	5
Up to two months	--	1	--	--	1
More than two months	--	1	--	1	2

Table IVb (continued). Global Ceiling on Banking System Credit, 1976-1983

## Extended Arrangements

	Asian Department							
	1976	1977	1979	1980	1981	1982	1983	1976-83
Total number of programs under extended arrangements	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>9</u>
Type of credit ceilings								
One ceiling banking system	1	1	1	2	2	1	1	9
Coverage of domestic assets and liabilities								
All domestic assets covered	--	--	--	--	--	--	--	--
Net other item not covered	1	1	--	1	1	1	1	6
Net other items covered but specified assets and liabilities excluded	--	--	1	1	1	--	--	3
Coverage of government deposits netted out, banking system	1	1	1	2	2	1	1	9
Credit subceilings	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>9</u>
Net banking system credit to public sector	1	1	--	1	--	--	--	3
Net banking system credit to government and some public enterprises	--	--	1	1	--	--	--	2
Net banking system credit to government	--	--	--	--	2	1	1	4
Secondary credit policy								
Performance criteria on reserve requirements	--	--	--	--	1	--	--	1
Credit policy on reserve requirements stated in letter of intent	--	--	1	--	1	1	1	4
Balance of payments test	1	1	--	--	--	--	--	2
Lag between test dates								
Up to one month	--	--	1	1	1	--	1	4
Up to one- and one-half months	--	--	--	1	1	1	--	3
Up to two months	--	1	--	--	--	--	--	1
More than two months	1	--	--	--	--	--	--	1

Table IVb (concluded). Global Ceiling on Banking System Credit, 1978-82

## Extended Arrangements

	Middle Eastern Department					1978-82
	1978	1979	1980	1981	1982	
Total number of programs under extended arrangements	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>6</u>
Type of credit ceilings						
One ceiling banking system	1	1	2	1	1	6
Coverage of domestic assets and liabilities						
All domestic assets covered	1	1	2	1	1	6
Net other item not covered	--	--	--	--	--	--
Coverage of government deposits						
Netted out, banking system	1	1	2	1	1	6
Credit subceilings	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>6</u>
Net banking system credit to public sector	1	--	--	--	--	1
Net banking system credit to government	--	1	1	1	1	4
Net banking system credit to government and some private sector	--	--	1	--	--	1
Secondary credit policy						
Performance criteria on reserve requirements	--	--	--	--	--	--
Credit policy on reserve requirements stated in letter of intent	--	--	--	--	--	--
Balance of payments test	--	--	--	--	--	--
Lag between test dates						
Up to one- and one-half months	1	1	1	1	1	5
Up to two months	--	--	1	--	--	1

Source: Executive Board documents.

Table V. Automatic Adjustments to Credit Ceilings in Stand-By Arrangements, 1979-83 and Extended Arrangements, 1975-1983

	Region					Total
	Asia	Africa	Europe	Middle East	Western Hemisphere	
Total number of programs	<u>27</u>	<u>68</u>	<u>15</u>	<u>8</u>	<u>47</u>	<u>166</u>
Programs with auto-						
automatic adjustment	<u>1</u>	<u>23</u>	<u>5</u>	<u>4</u>	<u>18</u>	<u>51</u>
Upward adjustment only	--	<u>2</u>	--	--	<u>7</u>	<u>9</u>
Downward adjustment only	1	16	4	--	1	22
Upward and downward adjustment <u>1/</u>	--	5	1	4	10	20
Adjustable for: <u>2/</u>						
External capital flows	1	18	4	4	8	35
Debt rescheduling	--	4	--	--	1	5
Domestic bond sales	--	1	--	--	1	2
Profits from exchange operations	--	2	--	--	--	2
Valuation adjustment	--	2	--	--	--	2
Arrears payments or rescheduling	--	1	--	--	2	2
Price of export commodity	--	--	1	--	--	1
Central bank foreign liabilities	--	--	--	--	7	7
Capital subscription to international organizations	--	--	--	--	2	2
Financing of stock changes	--	2	--	--	--	2

Source: Executive Board documents.

1/ These adjustments may be limited in either direction (e.g., limited upward, unlimited downward).

2/ Ceilings can be adjustable to more than one factor.

Table Va. Automatic Adjustments to Credit Ceilings By Region

Stand By Arrangements, 1979-83

	Department				
	African	Asian	European	Middle Eastern	Western Hemisphere
Total number of stand-by programs	<u>54</u>	<u>18</u>	<u>15</u>	<u>2</u>	<u>23</u>
Programs with automatic adjustments	17	1	5	--	11
Global	15	1	5	--	8
Subceiling	17	1	2	--	8
Automatic upward adjustment only					
Global	--	--	--	--	1
Subceiling	--	--	--	--	5
Automatic downward adjustment only					
Global	12	1	4	--	1
Subceiling	13	1	1	--	1
Symmetric adjustment					
Global	3	--	1	--	6
Subceiling	4	--	1	--	2
Reasons for adjustment <u>1/</u>					
Capital flows	15	1	4	--	4
Debt rescheduling	4	--	--	--	1
Domestic bond sales	1	--	--	--	1
Profits from exchange operations	2	--	--	--	--
Valuation adjustment	1	--	--	--	--
Arrears payments or rescheduling	1	--	--	--	2
Price of export product	--	--	1	--	--
Central bank foreign liabilities	--	--	--	--	5
Capital subscription to international organizations	--	--	--	--	2

Source: Executive Board documents.

1/ Number of reasons can be greater than number of programs.

Table Vb. Automatic Adjustments to Credit Ceilings By Year of Approval  
Stand By Arrangements, 1979-83

	Total: All Regions					1979-83
	1979	1980	1981	1982	1983	
Total number of stand-by programs	<u>15</u>	<u>18</u>	<u>21</u>	<u>24</u>	<u>34</u>	<u>112</u>
Programs with automatic adjustments	4	4	6	9	11	34
Global	4	4	5	7	10	30
Subceiling	3	2	6	8	8	27
Automatic upward adjustment only						
Global	--	1	--	--	--	1
Subceiling	--	--	1	2	2	5
Automatic downward adjustment only						
Global	3	1	4	4	6	18
Subceiling	2	1	4	4	5	16
Symmetric adjustment						
Global	1	2	1	3	3	10
Subceiling	1	1	1	2	2	7

Source: Executive Board documents.

Table Vc. Automatic Adjustments to Credit Ceilings By Region, 1975-1983

Extended Arrangements

	Department				
	African	Asian	European	Middle Eastern	Western Hemisphere
Total number of extended programs	<u>14</u>	<u>9</u>	--	<u>6</u>	<u>25</u>
Programs with automatic adjustments	6	--	--	4	7
Global	6	--	--	4	7
Subceiling	4	--	--	4	7
Automatic upward adjustment only					
Global	2	--	--	--	3
Subceiling	--	--	--	--	3
Automatic downward adjustment only					
Global	3	--	--	--	--
Subceiling	3	--	--	--	--
Symmetric adjustment					
Global	1	--	--	4	4
Subceiling	1	--	--	4	4
Reasons for adjustment <u>1/</u>					
Capital flows	3	--	--	4	4
Debt rescheduling	--	--	--	--	1
Valuation adjustment	1	--	--	--	--
Financing stock changes	2	--	--	--	--
Central bank foreign liabilities	--	--	--	--	3

Source: Executive Board documents.

1/ Number of reasons can be greater than number of programs.

Table Vd. Automatic Adjustments to Credit Ceilings By Year of Approval  
Extended Arrangements, 1975-1983

	Total: All Regions									
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1975-1983
Total number of extended programs	<u>1</u>	<u>1</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>9</u>	<u>14</u>	<u>7</u>	<u>10</u>	<u>54</u>
Programs with automatic adjustments	--	--	--	1	--	3	5	4	4	17
Global	--	--	--	1	--	3	5	4	4	17
Subceiling	--	--	--	1	--	3	5	3	3	15
Automatic upward adjustment only										
Global	--	--	--	--	--	--	1	2	2	5
Subceiling	--	--	--	--	--	--	1	1	1	3
Automatic downward adjustment only										
Global	--	--	--	--	--	1	1	--	--	2
Subceiling	--	--	--	--	--	1	1	--	--	2
Symmetric adjustment										
Global	--	--	--	1	--	2	3	2	2	10
Subceiling	--	--	--	1	--	2	3	2	2	10

Source: Executive Board documents.