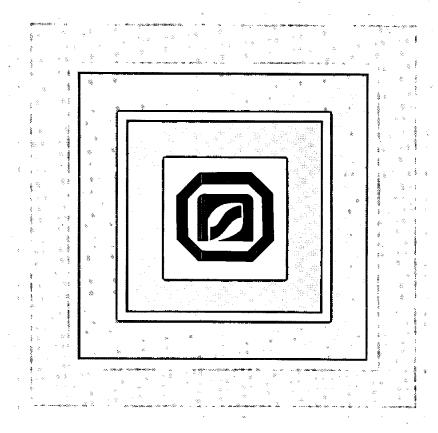
SELECTIVE CREDIT POLICIES IN THE SEACEN COUNTRIES A Study on Allocative Strategy

Gerardo S. Tison



The South-East Asian Central Banks (SEACEN)
Research and Training Centre

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FOREWORD

Monetary policy in the SEACEN region carries a tone of selectivity. This is most evident on measures adopted by Southeast Asian central banks and monetary authorities to influence the allocation of credit. In particular, selective type of credit policies are being implemented in the region to direct the flow of credit to certain sectors and to ensure that they obtain it below market interest rates.

This research project, "Selective Credit Policies in the SEACEN Countries: A Study on Allocative Strategy", discusses the extent and degree of such technique of distributing credit in the eight countries, looks at their objectives and examines the conditions under which they have been, and could be, successfully implemented. The relevant experiences of other developing and developed countries were also cited. This study was mainly based on the responses of the member central banks and monetary authorities to the questionnaire issued by the SEACEN Centre. Some of the information provided dated as far back as the first implementation of selective credit measures in these countries, that is, in the mid-1950s and extended up to the early part of 1985.

The study was conducted by Mr. Gerardo S. Tison, a research economist of the SEACEN Research and Training Centre, who is on secondment from the Central Bank of the Philippines. Mr. Tison also worked on a number of other research projects and staff papers, training courses and seminars. The SEACEN Centre takes this opportunity to extend to him its congratulations for a work well done and its appreciation for the contributions he has made to the research and training programmes of the SEACEN Centre.

The SEACEN Centre also acknowledges the assistance provided by the member central banks and monetary authorities in the preparation of this research project. However, the views expressed in this research work are those of the author and do not necessarily reflect those of the SEACEN Centre nor the member central banks and monetary authorities.

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Director

SEACEN Research and Training Centre

Kuala Lumpur, Malaysia December 1986

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SELECTIVE CREDIT POLICIES IN THE SEACEN COUNTRIES A Study on Allocative Strategy

by

Gerardo S. Tison

I. INTRODUCTION

Selective credit policies figure prominently of central banks of developed and developing countries alike. In the United States, selective credit measures have been associated with, among others, preferential treatment to residential mortgage loans and regulation of stock market In France, Italy and Belgium, methods to control and allocate credit in line with national economic objectives are fully accepted as desirable and their monetary authorities have been granted substantial explicit powers to this end. In the case of the developing countries in Asia, Africa and Latin America, selective credit policies are also used primarily as direct qualitative interventions in the allocation of credit rather than effecting changes in its aggregate quantity. While selective credit policies have been employed in the SEACEN countries as early as the establishment of their central banks, formal studies along this area are, however, relatively scant. Moreover. despite their extensive use, very few studies are undertaken in the region on how selective type of monetary policy instruments perform in allocating credit.

This study is aimed at surveying the use of selective credit policies in the SEACEN countries and examining the various methods and techniques in implementing them. Moreover, the study would attempt to investigate the range of conditions under which selective credit policies have been successfuly undertaken in the SEACEN region. The effectiveness of the various selective credit measures employed would be viewed against the objectives set forth by the respective central banks.

this study is basically an empirical undertaking which focusses on the experience of the SEACEN discussion on the theoretical aspects of countries, some selective credit policies and the experience of other central banks are included for two purposes. The first is to provide a better understanding of the concept and rationale of this particular type of monetary policy instrument. The second is to lay down the foundation from which South-east Asian central banks could improve on their existing methods of evaluating the effectiveness of selective credit instruments On the whole, it alternative ways of gauging their performance. is hoped that a more focussed view of selective credit policies could assist monetary authorities in tackling the fundamental issue of whether they should be continually relied on for credit allocation purposes or more specifically, in channeling credit to socially desirable activities.

The bulk of the institutional data of this study was provided by the eight SEACEN member central banks and monetary authorities through their responses to the questionnaire issued by the SEACEN Research and Training Centre. The questionnaire was designed to obtain the latest data available as at the end of 1984, particularly on the institutional aspects of selective credit policies, the various instruments employed, their

rationales and objectives, their implementation and evaluation. The responses to the questionnaire revealed that selective credit controls in the SEACEN countries are mainly prescribed on commercial banks. This group of financial institutions is the biggest source of credit in the eight countries and hence, selective credit policies addressed to commercial banks would have a significant impact on their economies' credit situation. In this study, therefore, the various selective credit instruments discussed were all implemented through commercial banks, unless stated otherwise.

Definition

Existing studies on the subject have given at least three definitions of selective credit policies. One definition views the use of selective credit policies as an attempt to influence general credit conditions by a policy tool other than changes in the magnitude of claims against the central bank. 1/
The reason given for this definition is that changes in the liabilities of the central bank (changes in high-powered money) are considered neutral, that is, they do not explicitly favour one use of credit or real resources over some other use. Thus, those instruments that change the quantity of cash and claims against the central bank and the cost of borrowing from the central bank are referred to as "general instruments of monetary policy". All other instruments are to be treated as selective. This definition by exclusion was deemed "narrow in scope and does not reflect the selectivity in those credit policies which rely

^{1/} Donald R. Hodgman, "Selective Credit Controls," Journal of Money, Credit and Banking, Vol. IV (May 1972).

on differential reserve requirements and, therefore, do affect the liabilities of the central bank in much the same way as the general quantitative monetary policy." 2/

The second definition is more quantitative and it ranks different policies according to their relative aggregate, versus selective, impacts. The impact of each policy on some economic aggregate, say, GNP, is calculated as well as its impact on the redistribution of real resources (or funds) into different The ratio of aggregate effects to redistribution is used as the basis in ranking a policy as primarily a selective credit policy or primarily a general credit policy. This measure varies between zero and infinity and the larger the number the more general (as opposed to selective) is the particular credit policy. 3/ The same authors who pointed out the shortcomings of the first definition also commented on this approach. that while it is easy to quantify the aggregative impact, it is both conceptually and operationally difficult to measure the redistributive impact.

^{2/} D.R. Khatkhate and D.P. Villanueva, "Operation of Selective Credit Policies in Less Developed Countries: Certain Critical Issues," in Money and Monetary Policy in Less Developed Countries, ed. by Warren L. Coats, Jr. and D.R. Khatkhate (New York: Pergamon Press Inc.) p. 591.

^{3/} William L. Silber, "Selective Credit Policies: A Survey," in Studies in Selective Credit Policies, ed. by Ira Kaminow and James M. O'Brien (Federal Reserve Bank of Philadelphia, 1975), pp. 98-99.

the shortcomings of Thus. considering the two definitions, a more pragmatic approach in defining selective credit policies has emerged. Since it is more suited to the specific credit policies adopted by the South-East Asian central banks, it was adopted as the definition of selective credit policies in this study. Selective credit policies are defined as those directed toward the allocation of credit to specific sectors of the economy. They are adopted to encourage or direct the flow of funds to priority sectors-- priority being determined within a broad spectrum of economic, social and political goals. "This definition has particular relevance in the context of less developed countries where the composition of spending credit is perhaps even more important than the aggregate spending, both from the point of view of promoting development and achieving other objectives of social policy."4/

In short, selective credit policies are employed for their allocative or distributive effect rather than on their general impact on the volume of credit. Another important consideration is that selective credit policies represent interventions in the market mechanism in allocating financial resources. Likewise, selective credit policies could also refer to those undertaken by the authorities to discourage or restrict the flow of credit to certain economic sectors or activities which under a given economic situation are considered less desirable. .Under this circumstance, these policies represent direct qualitative interventions in the pattern of credit distribution.

 $[\]underline{4}/$ D.R. Khatkhate and D.P. Villanueva, op. cit., p. 591.

Selective credit controls are also known by other terms and are often distinguished from the general, quantitative or indirect credit instruments used by central banks and monetary authorities. In view of this distinction, selective credit instruments are also referred to as qualitative or direct instruments of credit control. This study will also refer to these other terms for selective credit instruments.

Rationales and Objectives

The active use of selective credit policy rests on the assumption that the general level of effective demand, and consequently, the general level of prices and production can be altered by modifying the availability and cost of credit. In attempting to encourage or discourage specific types of activity, selective credit policy assumes further that the pattern of investment and production can be influenced by differentiating between the cost and availability of credit to different sectors.

Some economists have suggested the use of selective credit policy to offset credit market imperfections. imperfections are defined in the traditional sense that certain characteristics of credit markets produce deviations from Pareto optimality conditions. Imperfections mentioned most often appear to relate to the existence of non-price credit rationing on the part of institutional lenders and the "customer relationship". For instance, banks in developing countries are likely to rely more on non-economic considerations in allocating their loanable Credit allocation is usually based on personal relationships, political and other connections. At times, system of credit allocation assumes some form of "queuing" or lining up of credit on a first-come, first-served basis without

regard to the merits of the project at the time the loan is actually made. Even under the assumption that banks rely on economic considerations, there are instances when the increment of credit received by the smaller borrowers in times of credit contraction is much lower than what they would have received in different economic situations. This is based on the rational behaviour of banks which tend to cut down credit first to the higher-risk clients, who offer less possibility of returns or who are in a worse bargaining position. Thus, credit in developing countries flows in favour of trade and commerce, construction and other short-term, self-liquidating activities.

Moreover, the main thrust for selective credit policy has been based on a dissatisfaction with the non-discriminatory impact of traditional monetary instruments. Traditional or indirect instruments of monetary policy are geared towards affecting the monetary base without paying special the conditions of the individual attention to institutions, to the way the monetary base is distributed or how the financial system decides to allocate funds to different users. For example, in a situation where contractionary monetary policy is pursued in order to check inflationary pressures, selective liberalisation of credit is used as a means not only to encourage the development of certain productive sectors but also to protect them from the impact of the generally tight credit stance.

Under all these situations, it was felt by the authorities that an interventionist strategy via selective credit policies has to be employed to meet the needs of certain economic sectors which have little or no access to formal credit sources under a free market environment.

Authority of South-East Asian Central Banks to Formulate Selective Credit Policies

The use of selective credit controls as instruments of monetary policy in the SEACEN region dates back as early as 1949, particularly in the Philippines when its central bank was established, and even as recent as 1974 when they were first employed in Malaysia and Singapore to help curb inflation. The importance given by central banks in the region to these measures can be seen in their respective acts or charters which explicitly state the use of selective credit policies in the normal discharge of their responsibilities. Some central banks even enumerate the sectors which must be given preferential credit treatment in the same manner that areas where credit flow has to be discouraged or restricted are identified.

In Burma, the section on powers of credit regulations of the Union of Burma Bank Act states that--

"When, in the opinion of the President of the Union, it is desirable in the national interest to exercise any or all of the powers conferred by this section, the Bank may:

- a) fix maximum rates of interest or payment, which banks may charge for diffferent types of loans, advances or other credit operations, and which such banks may pay on various classes of deposits.
- b) define maximum maturities for loans and advances by banks and the types and amounts of collateral to be required against such loans and advances.

- c) place limits on the rate of increase of loans, advances and investments of banks, either in the aggregate or in any specified class or classes of such assets, within specified future periods of time.
- d) establish minimum cash margins for the opening of letters of credit by banks."

Bank Indonesia is empowered by its Act, as provided for in Article 32, Section 2, to "fix the rate and structure of the interest and shall determine the qualitative and quantitative limitations on the extent of credit by banks."

Among the authorised business of Bank Negara Malaysia, as provided for in the Central Bank of Malaysia Ordinance, 1958, includes specific reference to selective credit measures, as follows:

- (f) purchase, sell, discount and rediscount inland bills of exchange promissory notes drawn or issued for the purpose of financing seasonal agricultural operations or the marketing of primary produce and maturing within six months (exclusive of days of grace) from the date of acquisition:
- (ff) make advances for the purpose of assisting the growing or marketing of primary produce, to -
 - (i) authorities formed under any written law in the Federation; and

(ii) cooperative societies engaged in farming, agricultural, horticultural, pastoral, grazing or fishing operations;

...(ffff) establish a Special Investment Fund to finance specific projects, wholly or partly, in the public sector ... for the purpose of promoting economic development ... "

The Nepal Rastra Bank Act specifies the functions and powers of the central bank and these include those pertaining to selective credit policies. For instance, the Act stipulates that, " with due consideration to the monetary situation, the Bank shall provide loans or refinances to commercial banks or financial institutions advancing agricultural or industrial credit." The conditions of such loans or refinances will be as prescribed by the Rastra Bank. The Rastra Bank is also authorised to perform other functions such as selling, purchasing or underwriting shares or debentures of banks or financial institutions with the specific objective of promoting development of agriculture, industry and banking and to help establish institutions necessary for economic and banking development.

In the Philippines, selective credit policies have been in use since 1949 when the Central Bank of the Philippines was established. The Central Bank Act has a specific provision which states that the Monetary Board, in adopting policies and measures in accordance with its monetary administration, shall take into consideration their effects on the availability and cost of money and credit to particular sectors of the economy as well as to the economy as a whole. There is also a section entitled "Selective Regulation of Bank Operations", which provides, among others, the

following:

"... to influence the availability of bank credit for specific purposes, the Monetary Board may issue such regulations as it may deem necessary from time to time with respect to the maximum permissible maturities of the loans and investments which the banks may make ..."

Moreover, to discourage or restrict credit to specific areas, the same Act empowers the Monetary Board at any time to prescribe minimum cash margins for the opening of letters of credit and apply limits to the loans and investment of each bank or to specific categories.

The Central Bank of Sri Lanka started prescribing selective credit measures in 1961 as authorised under the "General conditions as to grant of credit facilities" of its Monetary Law Act, particularly:

"The Monetary Board may prescribe the conditions subject to which credit facilities of the Central Bank will be available to banking institutions, including conditions relating to the rates of interest charged by such institutions, to the purposes for which their loans in general are destined, and to any other matter affecting or connected with the credit policy of such institution."

II. OBJECTIVES AND INSTRUMENTS OF SELECTIVE CREDIT POLICIES IN THE SEACEN COUNTRIES

Objectives of Selective Credit Policies

Selective credit policies as instruments of monetary authorities are implemented to generate an impact in the financial markets. On the whole, their impact can be broadly into those which bear on prices or stabilisation divided objective of the central bank and the other, on the distribution of financial resources, which has an impact on the development role of the monetary authorities. However, some economists contend that the objectives of selective credit policies should not stop with their impact on the financial markets. contend that these policies should be viewed beyond proximate or intermediary goals as credit allocation or even such higher level goals as the attainment of more housing and increased exports of manufactured goods. In short, they believe that resource allocation is not an ultimate concern of society. For this group of economists, an output mixture is socially desirable only because it influences the attainment of higher order goals which might include Pareto optimality, equality of opportunity and social stability.

A survey of the objectives of selective credit controls in the eight SEACEN countries showed that these measures were formulated principally to direct financial resources along priority sectors of the economy, as identified in their development programmes. Hence, the objectives fall within the proximate or intermediate category. While the South-east Asian central banks recognise that the reallocation of credit is not an end-goal in itself, the difficulty of assessing the effect of increased credit on the sectoral output growth preclude them from

viewing the impact of these selective measures on the ultimate objectives of society such as redistribution of income. The central banks and monetary authorities in the region may or may not have a direct hand in the setting of these priority sectors eligible for preferential credit, but as it has been pointed out, "a central bank does not need to set priorities in order to help achieve them." 5/ Thus, measures which would exert credit impact on certain sectors of the economy are employed by the South-east Asian central banks in line with their development objective.

Moreover, the need for selective credit controls emanates from the perception of the authorities that the priority sectors in their respective countries do not get adequate credit. This becomes more significant in the developing countries since it is believed that these are the very sectors that would lead their economies to accelerated and sustained growth. It was also felt that without selective credit controls, these key sectors would not get adequate credit at reasonable cost, if at all provided, by the organised financial system. At the same time, the imposition of selective credit controls is aimed at checking the flow of credit to undesirable or non-priority activities, thus making available more credit to desired areas.

Selective credit policies in the SEACEN region were also employed to help stabilise the economy. In particular, selective credit policies were first employed by the Monetary

<u>5</u>/ David P. Eastburn, "Federal Reserve Policy and Social Priorities," <u>Business Review</u> of the Federal Reserve Bank of Philadelphia, November 1970.

Authority of Singapore and Bank Negara Malaysia as part of their anti-inflationary package in mid-1970.

Allocation of funds to priority sectors

In Burma, selective credit measures are aimed at providing credit for specific purposes at differential rates of interest. The priority sectors that would get preferential credit treatment are determined by the Economic Committee where the Chairman/Advisor of the Union of Burma Bank participates in its deliberation and in decisions relating to economic appraisal of priority projects. The priority sectors in Burma include (1) agricultural, timber and livestock sectors; (2) agro-based industrial sector; and (3) the mining sector.

To attain a desirable growth in Gross Domestic Product is the stated general objective of selective credit policies in In pursuing this objective, Bank Indonesia provides preferential credit treatment to priority activities. From time to time, the activities and sectors accorded priority status are changed and made known accordingly. For example, priority was given to activities involving food production, clothing and export. At the beginning of the Second Five-Year Development Plan, credit availability for new investments to indigenous-owned enterprises to support government's effort of reducing the inequality in business opportunities between the indigenous and non-indigenous Indonesians. As the Indonesian economy progressed and the supply of foodstuffs and clothing improved, the government gave priority status to the third component of basic needs-- shelter, by providing a low-cost housing financing scheme to low and mediumsalaried groups. Starting in June 1983, priority was shifted to

activities that support employment, cooperatives and exportoriented production.

Bank Negara Malaysia, through its lending guidelines to commercial banks and finance companies, ensures that priority sectors of the Malaysian economy as specified under the New Economic Policy have ready access to bank credit at reasonable cost. These sectors include the Bumiputera community, small-scale enterprises, agricultural food production, manufacturing and individual purchases of low-cost houses.

The task of allocating credit to priority sectors in Nepal is undertaken by the Priority Sector Committee. Governor of the Nepal Rastra Bank acts as the Chairman, with ten members from the Ministries of Finance, Food and Agriculture, Industry and Commerce, other government agencies, banks and other financial institutions. The Committee determines periodically the priority areas, fixes the annual financial assistance required by the banks and other financial institutions and prepares an annual loan plan for the priority sectors. Nepal's Sixth Plan, priority is given to the agricultural sector which provides employment to more than 90 per cent of the labour force and contributes more than two-thirds to its Gross Domestic Development of animal husbandry and horticulture is Other priority areas are cottage and small also emphasised. scale industries, exports and import-substituting industries. There is no formal categorisation of any sector as undesirable. However, in view of scarcity of financial resources, industries producing luxury and semi-luxury goods and importation of nonessential imports have been regarded as less preferred areas.

In the Philippines, the development objectives of its central bank are carried out principally through selective

credit policies. The Central Bank of the Philippines' role in identifying the priority and non-priority areas is seen in the membership of its Governor in the Cabinet Committee which deliberates and decides upon the five-year development plans. The areas and activities identified as priority are food production, particularly rice and corn; exports, particularly non-traditional; small and medium-scale industries; and medium and long-term lending.

Government of Sri Lanka has a Public Investment Programme which identifies the priority areas. The Central Bank of Sri Lanka lends its support to this programmme by gearing its selective policy instruments credit to favour agriculture, industry and tourism. Selective credit policy is also used as a key instrument in mitigating the adverse impact of high interest rate policy to ensure the availability of credit at low cost to priority sectors. Thirdly, selective credit measures are used to provide more incentives to productive sectors with a view to enhancing the supply situation in the economy.

There are three broad objectives under which the implementation of selective credit policies in Thailand are aimed at. First is to help quicken the pace of development of the priority sectors, namely, agriculture, industry and exports, without having to regulate financial institutions further. The second objective is related to the first, to ensure that the flow of credit to the priority sectors is ample. The third objective is to keep the expansion of undesired activities in check.

Stabilisation of the economy

Selective credit policies in the SEACEN countries, although employed primarily for credit allocation purposes, are

also used to stabilise the economy. Selective credit measures when employed to achieve such an objective are basically of short-term duration and are mostly geared to have a direct impact on prices and imports.

The only instance when the Monetary Authority of Singapore resorted to selective credit controls was in 1974 when Singapore was faced with inflationary pressures and a slowdown in economic growth. Monetary policy then had to be geared towards the conflicting objectives of dampening inflation and encouraging growth. A ceiling was imposed on the increase in bank lending in March 1974 to check the rapid rise in credit extension by banks, the large part of which financed speculative share transactions in the stock market. However, to encourage economic growth, guidelines were at the same time issued to banks to direct funds to productive sectors. With the easing of inflationary pressures in late 1974, a relaxed monetary policy posture was adopted and the credit controls were lifted by January 1975.

Bank Negara Malaysia, like the Monetary Authority of Singapore, first made use of selective credit controls as part of its anti-inflationary policy. In April 1974, commercial banks and finance companies were required to limit the rate of growth in their lendings in 1974 to certain percentages over their end-1973 outstanding credit. These ceilings were selectively relaxed in July and November 1974 and abandoned in 1975 when inflationary pressures moderated. However, from then on, the annual lending guidelines took a more growth-oriented objective, that is, to ensure that credit is directed to productive purposes and distributed equitably among national priority sectors.

In Indonesia, selective credit policies were also employed to control inflation. Likewise, in Sri Lanka the

implementation of various qualitative credit policies was also aimed at curbing credit to non-essential imports and thereby correcting imperfections in the balance of payments. The Bank of Thailand has incorporated selective control in its short-term monetary policy in 1984 by restricting the opening of letters of credit for imports. This measure would be discontinued upon attaining its objective of cutting down imports. The Nepal Rastra Bank and the Central Bank of the Philippines also prescribe cash margins in opening import letters of credit with the same objective of dampening imports.

Short- or Long-Term Considerations

Given the objectives that selective credit policies are supposed to attain, it can be said that measures designed for stabilisation purposes are generally implemented for a short or limited period of time while those geared towards economic development are viewed as long-term measures. This classification of selective credit controls into short-term and long-term measures was mentioned by Patel $\underline{6}/$ when he raised the following considerations:

Are they used as long-term devices or as short-term expedients? If they are used as an adjunct to the long-term process of development, is the intention to influence the lending policy of banks, or to alter the investment preferences of borrowers, or to create new investment opportunities?

<u>6</u>/ I.G. Patel, "Selective Credit Controls in Underdeveloped Economies," <u>Staff Papers</u>, IMF, Vol. IV, No. 1 (September 1954).

In the short-run, are they employed as exceptions to a tight money regime, or as a means of exercising a general restraint on credit, or as a way of obviating the need for any restraint on the over-all supply of credit?

The answers to these questions in the context of the South-east Asian central banks' experience will give a clearer picture of how and why selective credit policies are employed in the region.

Selective credit policies in the region are, on the whole, meant to redirect and increase the flow of credit to priority sectors. As such, they take on a credit allocation role and are used as devices to increase production and thereby contribute to the achievement of a higher rate of economic growth. These selective credit measures are not expected to produce effective results in the short-term and they are therefore enforced for longer periods of time. Thus, they are used as adjunct to the long-term development process. Even in short-term periods which require restraint in aggregate credit growth, selective credit policies are usually excluded from contractionary stance adopted as they are meant to continuously provide the credit needs of the priority sectors.

As already mentioned, selective credit controls are also employed in the short-term in line with the central bank's stabilisation goal. However, resort to these types of instruments for this purpose is not as extensively done as compared to their being used to achieve the development objective.

The fact that there is unfulfilled demand for credit in certain sectors and that the main sources of financing were

reluctant to go into these lending areas make it clear that selective credit measures in the SEACEN region are meant to alter the lending preferences of the financial institutions. Lastly, since selective credit policies make credit available at concessional rates to priority sectors, new investment opportunities are created and the preferences of some investors may be altered.

<u>Instruments of Selective Credit Policies</u>

A variety of selective credit instruments is employed by the central banks and monetary authorities of the SEACEN countries. These include those types viewed traditionally as aggregative instruments of monetary policy but are so designed so as to have more selective impact. For example, the rediscounting window in most of the central banks in the region operate as a source of low cost funds for priority sectors. An example of a more direct type of credit allocation measure is to require banks to set aside a certain percentage of their loan portfolio to selected activities.

As can be gathered in the following discussion, the instruments of selective credit policies employed by the Southeast Asian central banks, just like their counterparts in the developing countries of Latin America and Africa, are geared towards increasing the flow of credit to certain sectors. This reflects the active role of central banks in economic development and also, the need for interventions in their financial markets which are far from perfect. Hence, the type of instruments used are geared to financial institutions, in particular, to directly influence the composition of their loan portfolio and the rate of interest they could charge on certain loans. On the other hand, the main feature of selective credit controls in developed

countries like the United States, West Germany, Japan and Australia was that they sought to restrict credit at the ultimate consumption stage, in line with their stabilisation objective. This was evidenced by the imposition of limits or controls on credit for the purchase of stocks, consumer durables and motor vehicles. A more detailed discussion of the orientation of selective credit instruments in the SEACEN countries towards increasing credit to certain activities and sectors is given below.

Direct regulations on banks' credit portfolio

These take the form of preemptive uses of credit along specified sectors, or requirements to commercial banks to set aside specific portions or amounts of their credit to certain sectors. Direct regulations on the credit portfolio of commercial banks are in use in Malaysia, Nepal, the Philippines and Thailand (see Table 1). A priority sector common to all these countries which benefits from the direct intervention of the central banks in the commercial banks' credit portfolios is agriculture. On some occasions, directives are also issued to commercial banks in order to restrict their credit to specific activities, such as the importation of non-essential commodities.

The main instrument for selective credit policy used by Bank Negara Malaysia takes the form of annual lending guidelines to commercial banks and finance companies. In these guidelines, at least a certain percentage of their outstanding loans have to be extended to priority sectors to ensure that they have ready access to credit at reasonable cost. The first set of guidelines was issued in 1974 as part of a package of monetary and fiscal measures to control inflation. The latest lending guidelines which were issued by Bank Negara Malaysia on March 29, 1985 still

Table 1

SELECTIVE CREDIT PORTFOLIO REGULATIONS ON COMMERCIAL BANKS IN THE SEACEN COUNTRIES

(As at end-1984)

Country	Sector/Activity	Credit Floor/Guideline
Malaysia	Bumiputera Community	20% of total loans outstanding as at end-1983
. •	Agricultural food production	6% of total loans outstanding as at end-1982
e Carres	Small scale enterprises	5% of total loans outstanding as at end-1980 (of which half must be for Bumiputera community)
	Construction of new houses	20,000 units costing \$100,000 or less of which 6,000 units should be for Bumiputera
Nepa1	Productive Sector	25% of total loans outstanding
	Priority Sector	8% of total loans outstanding
, ;	Long-term investment	15% of total investment portfolio
Philippines	Agriculture	25% of total loanable funds of which not less than 10 per cent for agrarian reform
,	Investment or lending in locality where deposits are gathered	75% of total deposits
	$\mathcal{L} = \{ x \in \mathcal{L} \mid x \in \mathcal{L} \mid x \in \mathcal{L} \} $	
Thailand	Agriculture	13% of total deposits
	Lending to residents in area where branch is located	60% of total credit of branches
	Lending to farmers in area where branch is located	30% of total credit of branches

gave preference to the sectors identified in 1974, enumerated as follows:

- 1) at least 20 per cent of their loans outstanding as at December 31, 1984 should be for the Bumiputera community;
- 2) new firm commitments to individuals to finance the purchase of at least 20,000 units of newly-constructed houses, costing \$100,000 or less in each case, of which a minimum of 6,000 units should be for Bumiputera individuals;
- 3) at least 6 per cent of their total loans outstanding as at December 31, 1983 should be for agricultural food production; and
- 4) at least 5 per cent of their total loans outstanding as at end of 1980 must be extended to small scale enterprises under the Special Loan Scheme, of which at least half must be for Bumiputeras.

In Nepal, commercial banks have to extend at least 25 per cent and 8 per cent of their total loans to the productive and priority sectors, respectively. Moreover, commercial banks have to invest at least 15 per cent of their total investment portfolio to long term-purposes. On the other hand, the Nepal Rastra Bank issued a directive to commercial banks which took effect in July 1983 forbidding them from opening import letters of credit for 60 luxury goods. The restriction, however, was lifted in phases within April 1984.

Commercial banks in the Philippines are required to allocate at least 25 per cent of their loanable funds for agricultural credit, of which not less than 10 per cent shall be

made available for agrarian reform credit. All banks have to comply also with another regulation which states that at least 75 per cent of the total deposits gathered in a region should be loaned out or invested in the same area.

The Bank of Thailand requires commercial banks to extend credit of at least 13 per cent of their total deposits to the agricultural sector. Two measures with credit allocation impact are also tied up with granting branching permits to commercial banks, namely, at least 60 per cent of total credit of new branches should be extended to residents of that location and, at least 30 per cent of their total credit must be granted to farmers.

Preferential refinancing or rediscounting

The refinancing or rediscounting facilities of the central banks of Indonesia, Nepal, the Philippines, Sri Lanka and Thailand are also designed so as to function as credit allocation These credit windows operate under an incentive mechanisms. scheme where preferential or concessional interest rates higher refinancing values/quotas are given to commercial banks which rediscount papers or collaterals evidencing lending to preferred sectors and activities. On the other hand, Bank Negara and the Monetary Authority of Singapore provide rediscounting at preferential rates to export bills only. The refinance rates and maximum on-lending rates for exports, a sector which is accorded priority status and access to central bank refinancing in seven SEACEN countries, are given in Table 2.

Table 2

EXPORT REFINANCE RATES AND COMMERCIAL BANKS' ON-LENDING RATES

As of August 1986

(In Per Cent)

Country	Central Bank Refinance Rate	Maximum Commercial Bank Rate	Gross <u>Spread</u>
Indonesia	3	6	3
Malaysia	3.5	5.0	1.5
Nepal	, 11 · ·	15	4–3
Philippines	12.75	no limit	
Singapore	Below prevailing prime lending rate of banks	MAS rate + max. of	1.5
Sri Lanka	11 (Category 1	,	3 3.8
Thailand	5	7	2

The refinancing or rediscounting schemes for priority sectors of the South-East Asian central banks, as typified by the terms for export bills shown in Table 2, share the following important features:

- 1) Loan values of paper presented for rediscounting are higher for those which financed priority areas, even amounting to 100 per cent of the paper being rediscounted.
- 2) The refinancing rates for priority lendings are below the prevailing market interest rates.
- 3) To ensure that the low rates are passed on to the ultimate borrowers, maximum lending rates or permitted margins/spreads of commercial banks are prescribed by the central bank. This means that interest rates on lendings to priority activities are still controlled despite a deregulated interest rate policy adopted in Indonesia. Malaysia, Nepal. the Philippines and Sri Lanka.
- 4) Refinancing is always made available to priority areas even up to the extent of exempting them from the impact of contractionary credit stance adopted or excluding lendings to these sectors from any credit ceilings imposed on commercial banks. Refinancing conditions along this line are termed as "open-ended" or "unlimited" facility.

Interest rate ceilings

Apart from the prescribed maximum interest rates to be observed by banks when relending proceeds of central bank refinancing, interest rate ceilings on loans extended by commercial banks to certain sectors and classes of borrowers are

also set. The maximum rates apply to loans sourced by the banks themselves and are normally set below the prescribed general rate, in case of a regulated interest rate policy or below the prevailing market rate, for those countries under a floating interest rate regime.

Selective credit policy in Burma is built-in the specialised nature of its banking system. Thus, Burma has Myanma Agricultural Bank and Myanma Economic Bank which cater to the needs of the state economic enterprises and cooperatives. Credit is provided to these specific sectors under a differential lending rate structure to encourage investment in high priority areas. For example, ordinary and term loans of state corporations for working capital are charged annual rates of 6 per cent and 5 per cent, respectively. In contrast, small personal loans carry an interest rate of 24 per cent per annum.

In Indonesia, credit to high priority activities, particularly that extended by the state banks, is obtained below market rates despite the floating interest rate regime in the country.

In addition to the sectoral credit levels which have to be complied with by commercial banks and finance companies in Malaysia, maximum interest rates on these loans are also prescribed by Bank Negara Malaysia. These ceiling rates are, however, reviewed regularly and corresponding adjustments, if warranted, are made. The 1985 lending guidelines generally prescribed a 10 per cent interest rate ceiling on loans to priority areas as compared to a base lending rate which was at least 12 per cent during the years 1983-1984.

The Nepal Rastra Bank prescribes 10 per cent and 14 per cent interest rate limits on working capital loans for cottage and rural industries with fixed capital of Rs. 200,000 and over Rs. 200,000, respectively. To boost exports by keeping the cost of credit lower in financing export trade, the Nepal Rastra Bank reduced the lending rate of commercial banks for export bills credit to 8 per cent from 14 per cent, with effect from November 1983. The losses of commercial banks on such loans are being compensated by the Nepal Rastra Bank.

Interest rates in Thailand are regulated, thus, lending rates of commercial banks to priority areas like agriculture, industrial and export sectors are kept lower than those prescribed for regular lendings. Adjustments to these ceilings are made from time to time. For example, on March 6, 1984, the Bank of Thailand raised the maximum lending rates of commercial banks and finance companies by 1.5 percentage points to 19 per cent and 21 per cent, respectively. However, the ceiling rate on lending to the three priority sectors was maintained at 17.5 per cent.

Credit floors and ceilings

Minimum and maximum levels either in terms of volume or growth rate of credit are also prescribed by central banks and monetary authorities not only for the sole purpose of effecting changes in aggregate domestic credit. This strategy could have a selective impact as well when ceilings are imposed on those activities which are discouraged while preferred sectors are given higher credit ceiling levels or even treated "off-ceiling". The ceilings then rechannel funds from sectors on which limits have been placed to those unrestricted areas deemed worthy of larger amounts of credit.

Monetary policy is conducted by the Union of Burma Bank mainly through the prescription of credit ceilings and subceilings by type and function of credit. Based on the cash plan prepared by the Bank which contains the projected permissible level of money supply to be injected in the economy, total credit is allocated into three sectors: the public sector, the cooperative sector and the private sector. Credit allocated to the private sector, except for agriculture, is treated as a residual after meeting the requirements of the other two sectors.

The Central Bank of Sri Lanka, in connection with its annual credit planning exercise, prescribes mimimum and maximum changes on commercial bank credit which are broadly guided by the priority status accorded to certain types of lendings. 1984 National Credit Plan, the export sector has been accorded the highest priority status, and a policy decision was taken raise the share of export credit from the previous year's level of 14 per cent and reduce the share of import credit. Moreover, the 25 commercial banks agreed to contain their individual credit limits to the private sector, including cooperatives corporations and each bank is given an individual active plan which has to be implemented during the plan period. individual plan not only contains the maximum limits on credit expansion but also includes a purpose-wise distribution of credit.

The most recent guidelines for credit allocation to various economic sectors in Thailand were issued on June 19, 1984. Whereas the growth rate prescribed for commercial bank credit to private sector for 1984 was at 18 per cent of the amount outstanding at end-1983, growth of credit to the priority sectors was allowed to exceed the 18 per cent limit.

<u>Credit plan</u>

Selective credit policy in Sri Lanka is largely carried out through the national credit plan. The Central Bank of Sri Lanka started to implement an annual national credit plan in 1981 in an attempt to divert scarce bank credit from less important short-term, self-liquidating commercial loans to more important medium and long term credit. Specifically, the first objective of the credit plan is to make available the necessary credit facilities to faster-growing sectors by rationalising the use of bank credit by the private sector. It was felt that the marketdetermined credit structure is not always conducive to sustained and balanced growth of the Sri Lankan economy. the price of credit is raised as a short-term stabilisation measure, bank credit in the economy tends to get concentrated on sectors with higher private profitability. This may lead to a neglect of the vital sectors such as industry, agriculture and exports. Thus, the national credit plan in Sri Lanka represented an attempt at intervening in the market in order to bring about a more development-oriented credit allocation in the economy. second objective of credit planning is the attainment of development objective of the Central Bank of Sri Lanka by employing a novel instrument of selective credit control. In its pursuit for economic stability, the Central Bank has to determine the permissible level of credit in relation to real growth and emerging inflationary pressures in the economy. With the help of a national credit plan, the Central Bank of Sri Lanka could direct the limited amount of credit available towards the vital sectors.

The starting point of the formulation of the credit plan in Sri Lanka is the preparation of a monetary budget for the economy. This budget sets out the monetary target, taking into account the projected real growth, the estimated inflation rate and an allowance for increased monetisation in the economy. The monetary target is then translated into the permissible credit levels after allowing for the behaviour of the external sector and the credit requirements of the Government. These credit levels represent the demand side of the National Credit Plan and are further allocated between the Central Government and the private sector. After identifying the credit needs of the various sectors, total credit for the purpose of sectoral allocation is divided into 11 categories. From these categories, priority has been given to exports, agriculture and industry while a low priority has been assigned to imports and consumption.

The Union of Burma Bank also draws up a credit plan which is basically similar to that of the Central Bank of Sri Lanka, particularly in terms of setting credit ceilings and the allocation of permissible level of credit among the three main sectors: the public sector, the cooperative sector and the private sector. The Nepal Rastra Bank also draws up an annual credit plan in order to effect a more purposeful allocation of credit to different sectors. However, it is not as elaborate and as formal as the one implemented by the first two central banks.

Advance deposits against imports

Under this scheme, importers are required to make a cash deposit with commercial banks equivalent to a certain percentage of the amount of the import letters of credit opened. Generally, the commercial bank has to redeposit these advance payments in a special account with the central bank, commonly referred to as "marginal deposits". An advance deposit is required so as to put a strain on the importers' capital by

freezing their funds for the duration of the import and thereby impairs their ability to import at a substantial volume. As a result of increasing the importers' costs and reducing the volume of certain imports, the prices of those goods rise, and demand for them is checked. The selective impact of this technique arises from the amount of deposit required which may vary depending on the commodity imported, thus differentiating between imports and other goods as well as between different types of imports.

The first selective credit measure adopted in Nepal was a directive to commercial banks issued in 1966 to fix margin requirements of at least 40 per cent on loans advanced for This measure was aimed at moderating imports financing imports. which has been growing at a fast rate during that time. Margin requirements is used for stabilisation purposes in Nepal and therefore prescribed on a relatively shorter duration and varying degrees along with changing conditions in the economy. For example, to discourage imports of non-essential goods and thereby reduce the pressure on foreign reserves, the Nepal Rastra Bank issued a directive to commercial banks in May 1983 to open letters of credit with 100 per cent cash margin. With objective of easing the pressure on food shortage, the Nepal Rastra Bank, in April 1983 directed commercial banks not extend loans against food grains in the Teria. Following revival of new wheat in the market, this restriction was continued only for paddy from May 1983 and subsequently lifted in August of the same year.

Other central banks in the region which require advance deposits in opening import letters of credits are the Central Bank of the Philippines and the Central Bank of Sri Lanka. This requirement is also imposed as a means of restraining imports.

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This instrument when given an allocative character by central banks becomes another tool for selective credit policies. Oftentimes, it is used to encourage banks to re-orient their operations by channeling more of their resources to productive use. It is also used to discourage lending for speculation and other unproductive activities. The effectiveness of moral suasion depends on a variety of factors, the most important being the prestige and standing of the central bank or monetary authorities in the eyes of the public, and the degree to which the commercial banks are convinced that the actions taken are not only in the national interest but also in theirs. All the central banks and monetary authorities in the SEACEN group resort to moral suasion to achieve certain goals, whether selective or aggregative in nature.

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III. THE EFFECTIVENESS OF SELECTIVE CREDIT POLICIES IN THE SEACEN COUNTRIES

The effectiveness of selective credit policies could be gauged by relating them to the goals they are supposed achieve. Among the South-east Asian central banks which make use of selective credit policies to accelerate economic growth, increased flow of credit to priority sectors and the decrease in credit to non-preferred or undesired activities are commonly used as indicators of the effectiveness of various selective credit controls imposed. It should be noted that the efficacy of these measures is viewed along the intermediate goal of increasing credit to priority sectors, not in terms of their effectiveness increasing investment or output in these sectors. evaluation of the performance of selective credit policies in a limited manner can be traced to the difficulty in isolating the impact of credit from other factors affecting investment or output. Hence, what follows is an account of the effectiveness of their selective credit measures as viewed in terms of credit flows to targetted sectors and activities.

Burma

The implementation of selective credit policies in Burma is deemed effective because of the specialised nature of its banking structure which has been nationalised. Thus, the pattern and direction of loans is determined by a centralised agency and the state-owned banks allocate credit along official decisions. For example, the activities of the state economic enterprises take up over 90 per cent of total bank credit and such sizeable amount renders the allocation of credit along preferred sectors effective.

Indonesia

Selective credit policy in Indonesia is aimed at directing credit to priority sectors particularly those which are export-oriented, labour-intensive and essential goods producer. Commercial banks are obliged to report periodically their credit disbursements to these sectors to Bank Indonesia and outstanding credit along these areas serves as a criterion in measuring Outstanding effectiveness of selective credit policy. credit to agriculture increased progressively as of end-1981 September 1984, from 813 billion rupiah to 1,430 billion rupiah. to manufacturing industrial sector also substantial expansion, from 2,762 billion rupiah in 1981 6.091 billion rupiah. A similar increasing trend was traced small scale investment credit on permanent working capital: 1981 the total amount outstanding was 988 billion rupiah and this reached a level of 1,271 billion rupiah as of July 1984.

Malaysia

In its review of the performance of commercial banks in complying with the lending guidelines, Bank Negara Malaysia stated in its 1984 Annual Report that "as a group, the banks continued to comply with the guidelines on lending to the Bumiputera community and for agricultural food production." It was also noted that they exceeded their annual targets of housing loan commitments for the purchase of houses costing \$100,000 or less in each case. The minimum requirement for the small scale loans, however, has yet to be achieved although the compliance date is by December 31, 1985. On an individual bank basis, only six out of the 38 commercial banks have complied with the three principal lending guidelines as at end-1984, that is, loans to

the Bumiputera community, agricultural food production and housing loan commitments.

More specifically and using 1974 as a reference point, the year when the credit guidelines were initially issued, substantial improvement on the loans outstanding of commercial banks and finance companies as of-end 1984 to the following priority sectors were registered:

Bumiputera community

Outstanding loans of commercial banks to the Bumiputera community increased from \$537 million to \$11,327 million and from \$116 million to \$2,566 million for the finance companies. As a percentage of commercial banks' total loans outstanding, credit to the Bumiputera community accounted for 26 per cent in 1984 as compared to 9.6 per cent in 1974.

Small-scale enterprises

Commercial banks' credit to this sector rose from \$747 million as at end 1974 to \$7,027 million at the end of 1982 while for the finance companies such loans increased from \$227 million to \$1,271 million. Although the lending guideline to small-scale enterprises has been stopped in 1983, it was noted that loans to this sector continued to rise and accounted for 9.4 per cent and 19.1 per cent of total outstanding loans of commercial banks and finance companies, respectively.

Housing

Total loans extended for housing by commercial banks increased from \$403 million in 1974 to \$4,173 million in 1983.

This represented 11 per cent of their total outstanding loans in 1983 as compared to 7 per cent ten years ago. Finance companies increased their loans from \$88 million or 12 per cent of their outstanding loans in 1974 to \$1,282 million or 17 per cent of total loans in 1983. The commercial banks were also required to make new firm commitments in 1984 to individuals to end-finance the purchase of at least 20,000 units of newly-constructed houses costing \$100,000 or less in each case, of which 6,000 units should be for Bumiputera house-buyers. By the end of 1984, commercial banks'firm commitments totalled 25,738 units of which 7,735 were for Bumiputera.

Nepal

Inadequate data in Nepal makes it difficult to ascertain precisely the success of particular selective credit measures. However, it was believed that the 100 per cent marginal cash requirement in opening letters of credit in the importation of 60 luxury goods and the restriction on advancing loans against foodgrains definitely helped in achieving the respective objectives of dampening the flow of imports and curbing the expansion of loans against foodgrains.

In assessing the effectiveness of selective credit policies introduced primarily to induce the flow of resources to productive sectors, the percentage of total loans extended to priority sector to total deposits of commercial banks is calculated by the Nepal Rastra Bank. The figures calculated under this method showed that during the eight-year period covering July 1975 to July 1983, commercial banks' total investment in the priority sector increased by Rs. 158 million to reach a level of Rs. 174 million in mid-July 1983. Of the total outstanding loans, a major share was absorbed by the industrial

sector, followed by the agricultural and services sector. At mid-July 1983, credit to the priority sector accounted for 3.4 per cent of total loans and advances as against 1.2 per cent in July 1975. Although the commercial banks have not been able to meet the requirement of investing at least 8 per cent of their total deposit liabilities to priority sectors, their lendings to these areas have been increasing.

Philippines

The effectiveness of selective credit policy in the Philippines is gauged by the loans granted to the priority sectors through the Central Bank rediscounting window. From the period 1970 to mid-1984, rediscounting to the non-traditional exports averaged P2.4 billion and accounted for the largest share of total rediscounts or almost 30 per cent. Rediscount credit to the agricultural sector, notably rice, corn and food averaged P2 billion during the same period and accounted for the second largest average share to total rediscounts or 29 per cent.

Real economic indicators also pointed favourable growth trends in the priority sectors which are beneficiaries of selective credit policies. Although the positive contribution of selective credit policy could not be isolated, it was felt that the self-sufficiency achieved in rice, white corn and vegetables 1977 could be attributed to available preferential rates together with price support, use of highyielding varieties and improved irrigation and extension services. Likewise, non-traditional exports which accounted for only 9 per cent of total exports in 1971 progresively increased its share to reach 57 per cent in 1983. In value terms, earnings from non-traditional exports expanded 30 times over the level obtained in 1971 to reach US\$2,846 as of end 1983.

Singapore

Selective credit policy was adopted for a brief period in Singapore, from March 1974 to January 1975, as part of a package of measures to dampen inflationary pressures. It was felt that such measures might have helped in reducing inflationary pressures along with other more important factors like reduced world inflation, "passing over" of the first oil crisis, improved world crop harvest and falling world commodity prices.

<u>Sri Lanka</u>

Changes in the direction and the term of lending of commercial banks serve as indicators of the impact of selective credit measures in Sri Lanka. Quarterly surveys undertaken by the Central Bank of Sri Lanka have shown that the share of short term advances of commercial banks has declined from 78 per cent in 1977 to 71 per cent in 1983. Correspondingly, the combined share of medium- and long-term advances has increased from 22 per cent to 29 per cent. This improvement is partly indicative of the impact of the medium- and long-term refinance schemes of the Central Bank and that of the National Development Bank which was established by the Central Bank. The contribution of refinance schemes in encouraging medium- and long-term loans gains more importance when viewed in the light of the reluctance of commercial banks to go into these loans unless backed by refinance facilities.

Credit planning

The purpose-wise distribution of credit in the annual credit plan exhibited varying levels of attainment. In 1982, the

agricultural sector lagged behind the planned credit targets. This was attributed mainly to a slack in demand rather than to a constraint in credit supply. This was also reflected in the Central Bank agricultural credit refinance window which has more or less remained stagnant at Rs. 136 million.

The industrial sector showed a remarkable performance in its credit utilisation in 1982 as its target credit level was exceeded by a high margin. This was mainly due to the generally satisfactory performance of the sector during the year. Consequently, the share of industrial credit to total commercial bank credit to the private sector rose from 22 per cent as of end-1981 to 24 per cent in 1983.

Thailand

Exports

The refinancing window of the Bank of Thailand is largely geared to the export sector where more than 90 per cent of total refinancing has been channelled. Proceeds of refinancing, however, have been going to exports of rice, tapioca products and sugar whose markets are either well-established in the case of rice or restricted by quotas as in the case of tapioca products and sugar. Hence, the impact of export refinancing in increasing exports in these products could not be fully pinpointed.

Agricultural credit

Since the introduction of the agricultural credit requirement, agricultural credit extended directly by commercial banks and through the Bank for Agriculture and Agricultural

Cooperatives (BAAC) has increased significantly, from 4.7 per cent of total credit in 1975 to 12.5 cent in 1983. As a proportion of agricultural GDP, agricultural credit of commercial banks has increased from 4.2 per cent in 1975 to 25.5 per cent in 1983. It has been observed that commercial banks remain unable to extend all the required amount directly to the agricultural sector and therefore have to deposit the shortfall to the BAAC. These deposits however, have been declining as a proportion of the required amount, from 51 per cent in 1976 to 21 per cent in 1983. This reflected attempts of commercial banks to lend directly to viable agricultural projects, something which they would have not done if the requirement had not been imposed.

Hire-purchase credit

Hire-purchase credit for passenger cars and commercial vehicles which is discouraged has continued to increase in Thailand. This is particularly evident in the case of finance companies where hire-purchase credit increased from a total of Baht 2,801.6 million in 1978 to Baht 3,442.2 million in 1983. In the case of commercial banks, a slowdown was noted, from Baht 865 million in 1978 to Baht 772 million in 1983.

Priority Sectors Credit as a Percentage to Total

The evaluation of the effectiveness of the various selective credit instruments employed by the South-east Asian central banks, as gauged through credit flows in the sectors favoured, can be supplemented by other statistical evidence. In particular, to supplement the data on incremental credit which flowed into the preferred sectors cited by the monetary authorities, this study will also provide the changes in the structure of specific categories of commercial bank credit.

Agriculture and exports were identified by the SEACEN countries as priority and therefore their selective credit policies were aimed at increasing the flow of credit at concessional interest rates to these areas. While there are other factors that could account for credit flow to these priority sectors (such as a slow-down in demand for export credit in times of recession in the country's trading partners), the declining share of agricultural and export credit to total credit of commercial banks calls for a serious consideration of the efficacy of selective credits policies in channelling more funds to these sectors.

Agricultural credit

Table 3 shows the share of agricultural credit to total credit outstanding of commercial banks in five countries where data is available. On the whole, the picture for agricultural Malaysia, Nepal, the Philippines, Sri Lanka and credit in Thailand is not very bright. Agriculture is one of the major sectors in these countries, contributing a substantial share in their Gross Domestic Products and absorbing a large part of their labour forces. And yet, credit extended to the sector by the biggest group of financial institutions seem to indicate a reluctance on the part of commercial banks to 20 into financing. In Malaysia and Sri Lanka where commercial banks are not given quotas for agricultural lending as required in Nepal, the Philippines and Thailand, the share of agricultural credit to total even declined through the years.

In its annual lending guidelines, Bank Negara Malaysia requires commercial banks to extend at least a certain percentage (6 per cent as at end-1984) of their loans outstanding as at the end of the year for agricultural food production. While the

Table 3

SHARE OF AGRICULTURAL CREDIT OUTSTANDING TO TOTAL CREDIT OF COMMERCIAL BANKS

(In Per Cent)

Malaysia	<u>Nepal</u>	<u>Philippines</u>	<u>Sri Lanka</u>	Thailand
10.2		10.0		
10.4		8.7		2.3
10.9		7.8		2.2
8.3	0.6	6.1		1.9
7.5	-	5.8*		1.9
7.5	0.7			3.4
6.7	1.2		13.9	4.3
6.9	3.1	13.6	17.2	5.2
7.1	2.8	10.7	16.0	5.4
6.6	1.0	11.9	14.8	5.4
7.8	0.9	15.6	13.3	5.6
7.5	0.9	12.9	11.0	6.2
7.2	2.3	12.9	12.1	7.2
6.5	3.3	13.2*	10.9	7.4
6.1	3.3		9.7	7.8
6.0				7.4
	10.2 10.4 10.9 8.3 7.5 7.5 6.7 6.9 7.1 6.6 7.8 7.5 7.2 6.5	10.2 10.4 10.9 8.3 0.6 7.5 - 7.5 0.7 6.7 1.2 6.9 3.1 7.1 2.8 6.6 1.0 7.8 0.9 7.5 0.9 7.5 0.9 3.1 3.1 3.1 3.1 3.1 3.1 3.1 3.1	10.2 10.0 10.4 8.7 10.9 7.8 8.3 0.6 6.1 7.5 - 5.8* 7.5 0.7 6.7 6.7 1.2 6.9 3.1 13.6 7.1 2.8 10.7 11.9 7.8 0.9 15.6 15.6 7.5 0.9 12.9 12.9 7.2 2.3 12.9 6.5 3.3 13.2* 6.1 3.3 13.2*	10.2 10.0 10.4 8.7 10.9 7.8 8.3 0.6 6.1 7.5 - 5.8* 7.5 0.7 13.9 6.7 1.2 13.9 6.9 3.1 13.6 17.2 7.1 2.8 10.7 16.0 6.6 1.0 11.9 14.8 7.8 0.9 15.6 13.3 7.5 0.9 12.9 11.0 7.2 2.3 12.9 12.1 6.5 3.3 13.2* 10.9 6.1 3.3 9.7

Sources: Bank Negara Malaysia Quarterly Bulletins
Bank of Thailand Quarterly Bulletins
Central Bank of the Philippines Annual Reports
Nepal Rastra Bank Quarterly Bulletins
SEACEN Centre Economic Survey Questionnaires

^{*} as of September

commercial banks as a group were able to meet the target level, the percentage share of agriculture to total credit of commercial banks shows a declining pattern. Credit to agriculture accounted for about 10 per cent in the early 1970s but this has declined through the years. Thus, during the early 1980s, agricultural credit of commercial banks only accounted for about 6 per cent of their credit portfolio, the same level as the required percentage under the annual credit guidelines. On the surface, it is expected that the share of agricultural credit should have increased upon the imposition of the agricultural food production guideline.

The same situation was obtained in Sri Lanka. Agricultural lendings of commercial banks accounted for as high as 17 per cent of their total in 1977 and remained around that level in the latter part of the decade. However, towards the 1980s, the share of agricultural credit has been going down and even reached as low as 9.7 per cent in 1985. This declining pattern was registered despite the implementation of the annual credit plan since 1981, where agriculture is one of the priority sectors.

The positive impact of the requirement to commercial banks to set aside a certain percentage of their total deposits or loans on agricultural credit can be seen in Nepal, the Philippines and Thailand. The Nepal Rastra Bank in 1974 made it obligatory for commercial banks to invest at least 7 per cent (now raised to 8 per cent) of their total liabilities in agriculture and other priority sectors. An indication of the impact of this "forced" investment scheme can be seen in the share of agricultural credit to total credit, which was less than 1 per cent prior to the regulation and has gradually increased to 3 per cent in 1984.

Likewise, in Thailand, starting in 1974 commercial banks were required to lend at least 13 per cent of their outstanding deposits for agricultural purposes. In 1973 and 1974, agricultural credit of commercial banks comprised only 1.9 per cent of their total credit. A year after the promulgation of the regulation, agricultural credit's share almost doubled, at 3.4 per cent in 1975 and this has continued to increase thereafter, and reached a level of more than 7 per cent from 1982 to 1985.

Lastly, in the Philippines, the requirement to commercial banks to set aside 25 per cent of their loanable funds for agricultural credit came into force in 1975. Five years prior to this regulation, agricultural credit of these banks took an average share of 7.7 per cent. However, starting in 1977, a significant change occured and the share of agriculture ranged from 10.7 per cent in 1978 to 13.2 per cent in 1983.

the compulsory element in Nepal, the Without the trend for agricultural credit's Philippines and Thailand, share may follow that in Malaysia and Sri Lanka. In fact, in the Philippines and Thailand, the commercial banks had difficulty in fulfilling the requirements. The situation has even gone to the extent of commercial banks in the Philippines clamoring for the rescindment of the requirement, citing among others, their lack of the high in agricultural financing, expertise administrative costs involved and the large exposure to risk. The Philippine authorities have partially responded to this by allowing commecial banks to purchase government securities in lieu of actual lending to the agricultural sector. The amount of substitution to government securities, however, is subject to a maximum level and the fact that this alternative is exhausted to its limit indicates the lukewarm attitude of commercial banks towards agricultural financing. This "substitute" to agricultural lending is favoured even in the presence of liberal rediscounting scheme for agricultural lending of the Central Bank of the Philippines, in the form of virtually unlimited quotas, low rediscount rates and higher spreads.

Export credit

While commercial banks are not expected traditionally to take an active part in agricultural financing, involvement in providing credit to trade is regarded as a typical undertaking. However, the data in Table 4 for three countries seem to show that if they are actively involved in trade financing, it could be on the import, not on the export side. Sri Lanka and Thailand, credit for export-related activities is highly encouraged by their governments. priority given to export credit appeared to be not actively supported by commercial banks in the three countries since the amount of credit going to exports has been declining in relation to their total credit outstanding. In Nepal, export credit in the last four years of the 1970s took an average share of 8.4 per However, by the 1980s, this share started to decline, reaching as low as 2.4 per cent and 3.6 per cent in 1983 and 1984, respectively.

In Sri Lanka, the share of export credit to commercial banks' aggregate credit was tracing a progressing pattern from 1971 to 1977, from 6.9 per cent to 14.9 per cent. This trend was, however, reversed starting in 1978 when export credit share dipped to 11.9 per cent and this continually dropped to reach a low of 5.8 per cent by 1984.

ARE OF EXPORT CREDIT TO TOTAL CREDIT OF COMMERCIAL BANK

SHARE OF EXPORT CREDIT TO TOTAL CREDIT OF COMMERCIAL BANKS (In Per Cent)

	Nepal*	Sri Lanka**	Thailand***
1970	¥	6.9	٠.
1971		6.5	
1972	' .	8.9	
1973		9.0	9.5
1974		9.2	11.6
1975	۲	9.0	12.3
1976	8.1	11.3	13.0
1977	7.6	14.9	10.7
1978	8.2	11.9	11.1
1979	9.6	10.1	12.9
1980	4.0	8.8	11.1
1981	5.0	7.5	10.1
1982	2.4	6.1	9.5
1983	2.4	6.7	7.8
1984	3.6	5.8	8.2

Source: Central Bank of Sri Lanka Annual Report, 1984
Bank of Thailand Quarterly Bulletins
Nepal Rastra Bank Quarterly Bulletins

^{*} Export bills purchased and loans against export bills

^{**} Export bills purchased and discounted

^{***} Export credit outstanding

The situation in Thailand for export credit was not encouraging too. By the early part of the 1980s, export credit of commercial banks accounted for less than 10 per cent. In contrast, the previous years registered shares as high as 13 per cent in 1976 and 1979 or no less than 11 per cent from 1973 to 1980.

IV. CONDITIONS TOWARDS MORE EFFECTIVE SELECTIVE CREDIT POLICIES

Selective credit policies just like other monetary policy instruments require certain conditions to ensure their effective implementation. In this study, two sets of conditions that lead to more successful selective credit schemes discussed. One set of conditions includes those identified academic studies, particularly certain characteristics in the credit market which influence the impact of selective credit policies to the lenders, borrowers or credit instruments. applicability or existence of these conditions in the SEACEN countries will be discussed. The other set of conditions is viewed along the experience of the central banks and monetary authorities and refers more on the implementation of selective credit instruments, their advantages and limitations. done in the previous sections of this study, relevant experiences of the South-east Asian and other central banks will be cited.

Conditions Identified by Some Studies

Existing studies on the effectiveness of selective credit policies have viewed their impact on the pattern of financial flows and on the allocation of real resources. Some studies have treated change in financial flows as an end in itself. Another view is that the redistribution of financial flows is only a proximate goal, that is, only a means to reallocate resources and hence there should not be any dichotomy between the two impacts. Any divergence should be taken as reflection of the failure of selective credit policy because financial flows have no significance of their own. 7/ However, a

^{7/} Franco Cotula and Tommaso Padoa-Schioppa, "Direct Credit Controls as a Monetary Tool," Quarterly Review (September 1971), Banca Nazionale del Lavoro.

third view states that in assessing the effectiveness selective credit policies, the distinction between the financial impact and real impact is of no material significance. It was said that this is particularly true in less developed countries where financial markets are not well developed and where the basic issue is to bring about redistribution of real resources interventionist policies. 8/ Lastly, while the through of ultimate impact on real resources importance discounted, some studies have advanced reasons for the emphasis on the proximate objective. First, popular and legislative concerns with resource allocation policies seem to have this Second, it is more difficult to quantify the impact of selective credit policies on the ultimate goal. 9/

Despite the divergence in views regarding the desired objectives of selective credit policies, economists studying the subject have agreed on some conditions or determinants of their effectiveness. Theoretical studies on the subject have identified three categories of selective credit policies with corresponding preconditions if they have to impact on financial or real resource allocation. These are the policies imposed on

^{8/} D.R. Khatkhate and D.P. Villanueva, "Operation of Selective Credit Policies in Less Developed Countries: Certain Critical Issues," Money and Monetary Policy in Less Developed Countries, ed. Warren L. Coats, Jr. and Deena R. Khatkhate (New York: Pergamon Press, 1980), p. 598.

^{9/} Ira Kaminow and James O'Brien, "Issues in Selective Credit Policies: An Evaluative Essay," Studies in Selective Credit Policies, edited by the same authors, (Federal Reserve Bank of Philadelphia, 1975), p. 4.

lenders, borrowers, or credit instruments. Selective credit instruments applied to lenders or financial institutions include portfolio restrictions and differential reserve requirements. On the side of the borrowers, the instruments of selective credit policies include interest rate subsidies and capital-issuing controls while those intended for credit instruments are interest rate ceilings and controls over other terms of credit and change in the characteristics of credit instruments. 10/

Studies on conditions influencing the effectiveness of selective credit policies dealt largely on those imposed on lenders. Specifically, the condition states that for selective credit policies to have an impact on relative interest rates, lenders must view various forms of credit as poor substitutes for each other so that a restriction on one type of asset of some institutions does not lead to an increase in the holding of same asset by other financial institutions. However, this condition will only have a financial impact. Hence, conditions must also be satisfied on the part of the borrowers in order to extend the impact of a particular selective policy on real resource allocation. The first is that the borrowers must also view different categories of credit instruments as poor substitutes for any particular type of expenditure. For example, a borrower in financing the purchase of a house must not be able to substitute freely between mortgage credit and bank loans, or any other forms of credit. If the borrower can easily finance real expenditures with different types of credit, then the change

^{10/} William L. Silber, "Selective Credit Policies: A Survey," Studies in Selective Credit Policies, ed. Ira Kaminow and James O'Obrien, (Federal Reserve Bank of Philadelphia, 1975) pp. 100-102.

in relative rates of interest on various forms of credit, as induced by interest rates, will result only in a change in the type of funds borrowed but not on the composition of real spending. The other additional condition is that the interest elasticities of different categories of expenditure must be different, that is, certain kinds of investment should be more responsive to interest rate than others. 11/

On selective credit policies imposed on borrowers, specifically the technique of interest rate subsidy, condition for their effectiveness is the opposite for those imposed on lenders. It has been shown by Penner and Silber that an interest rate subsidy is more effective in allocating financial resources if there is a high degree of substitutability between securities in lenders' portfolios. 12/ This is due to fact that an interest rate subsidy produces an increased demand for that category of funds. If the elasticity of supply is great (that is, if the elasticity of substitution on the part of lenders is large), then the increased demand for funds elicits a large increase in supply and a large decline in the rate charged to the borrower.

In addition to the substitutability factor, another condition is that lenders and borrowers should have no preference for a particular distribution of financial assets

^{11/} William L. Silber, op. cit., pp. 103-105.

^{12/} Rudolph G. Penner and William L. Silber, "The Interaction Between Federal Reserve Credit Programs and the Impact on the Allocation of Credit," American Economic Review 63 (1973), pp. 838-852.

and liabilities. 13/ In other words, selective credit policy is also ineffective when the preference of the borrowers, on the one hand, and the lenders, on the other, for a particular composition of financial flows is set and unalterable, that it forces the "real" and "financial" operators to cut down not only on the types of financing that are subject to limits, but also on all the other types, merely in order to keep their composition unchanged. For example, when a bank wishes to keep 25 per cent of its credit in securities and 75 per cent in loans, and regards any other distribution as totally undesirable, a policy aimed at placing a limit on the total loans is also going to reduce the total of securities.

Although the above conditions were identified in the context of developed countries, particularly in the United States, D.R. Khatkhate and D. P. Villanueva 14/ have pointed out their applicability in the developing countries, as follows:

The condition of poor substitutability between credit instruments is easily satisfied in the developing countries since their financial markets are more fragmented and far from perfect compared to those in developed countries. In view of this, the flow of information between market zones is less as evidenced by the isolation of rural financial markets from those in the urban areas. Moreover, substitutability between financial instruments

^{13/} Tommaso Padoa-Schioppa, "Selective Credit Policy: Italy's Recent Experience," Banca Nazionale del Lavoro, Quarterly Review, March 1975.

 $[\]underline{14}/$ D.R. Khatkhate and D.P. Villanueva, op. cit., p. 600.

is less likely to happen in view of the limited range financial instruments available in the developing countries. 0n the condition that lenders and borrowers must not have particular composition of preference for а assets and liabilities, it was stated that this presumes that participants in the financial markets of developing countries are very and well-informed. Again, due to the sophisticated underdeveloped state of their financial markets, lenders and borrowers in the less developed countries are not expected to have strong preference for a particular composition of assets and liabilities.

On the contrary, it was pointed by the same authors that the underdeveloped financial structure of developing countries will make selective credit policies on borrowers less effective. The condition of a high degree of substitutability between different securities in lenders' portfolios depends on the existence of a very elastic supply of credit which is not the case for developing countries. This is due, among others, to small supply of savings and less financialisation of available savings. Thus, when the credit structure is inelastic, any selective credit policy on borrowers leads to circumvention of it by lenders through diversion of subsidised credit to non-priority sectors.

On the condition that interest rate elasticity of different categories of expenditure must be different, Khatkhate and Villanueva argued that the response of different types of investment to changes in interest rates in developed and developing countries is similar.

An important consideration with regard to these conditions as being applicable to developing countries is the

kind of selective credit instruments used by the monetary The analysis of these conditions revolves mainly on rate subsidy as the selective credit instrument. interest However, in the particular case of the South-east Asian central banks, a subsidy or ceiling on interest rates is used to strengthen the efficacy of other selective credit policy instruments which are more extensively used. In particular, the direct lending guidelines or requirements to set aside certain levels of commercial bank loans to priority sectors do not even bring the question of substitutability between Likewise, the preferential refinancing schemes for securities. certain lendings of commercial banks in the SEACEN countries do not give the lender much leeway with respect to substitutability between assets. In both direct portfolio regulations refinancing schemes, commercial banks have to observe maximum interest rates charged to their borrowers.

In sum, the most commonly used instruments of selective credit policy by the South-east Asian central banks do not pose much of a problem in order to satisfy the condition for their effectivenes when imposed on lenders' side. The leakage in their effectiveness lies more on the part of the borrowers or end users as can be seen in the following section which deals on the experience of central banks in implementing various instruments of selective credit policies.

Experience of Central Banks

Based on their own evaluation, the South-east Asian central banks felt that the implementation of various selective credit measures has achieved some degree of success as far as increasing or decreasing the flow of credit to preferred or non-preferred sectors is concerned. Although the impact of selective

credit controls could not be easily separated from other causal factors, it was considered by the central banks that increment (or decrease) in credit to priority (or low priority) sectors could not have been achieved or could have proceeded at a much slower pace in the absence of these measures. the mere imposition of selective credit controls is not a guarantee for the attainment of their objectives. There is a need a more systematic or methodical way of implementing them. The following account of the manner in which selective credit were implemented by the South-east Asian and other notably those in Latin America, could be central banks. instructive in enhancing the effectiveness of selective credit policies.

Setting of credit priorities and targets

'A selective credit programme is more likely to succeed if it has a clear list of priorities and if quantitative credit targets are set. A system of sectoral priorities in lending needed to ensure that the measures serve the purpose of achieving a shift of credit from non-preferred to preferred borrowers rather than merely shifting credit among preferred sectors. While all the South-east Asian central banks have identified some priority areas that could benefit from selective credit measures, it can be said that those with clearly defined and narrower set of priorities are likely to attain their targets as compared to those which identified their priority areas in a more general way, such as declaring the whole agricultural, industrial or productive sectors as priority. The priority lending system also guards against the diffusion of limited credit resources over a large area, thus leading to a weaker impact.

Likewise, the setting of quantitative credit targets facilitates in the monitoring and evaluation of the effectiveness of the selective credit measures. The more specific the targets are, the easier it becomes to evaluate their effectiveness. For instance, the targets set by Bank Negara Malaysia under its lending guidelines are so detailed as to even set goals on the number of housing units to be established, the incremental loans that should go to a sector in one year, etc.

Adoption of a system of incentives and penalties

A number of central banks in the region adopt a system of incentives or penalties in implementing selective credit measures to encourage or ensure the compliance of these measures. Likewise, the adoption of such a system was also brought about by the fact that commercial banks, on their own, are not willing or are not capable of going into these lending areas.

In Burma, the Myanma Economic Bank can impose penalties on late repayment of loans by public enterprises by increasing the interest rate charged. On the other hand, interest rate rebates are allowed in cases of early repayment of seasonal loans to state corporations or cooperative societies for the purchase of agricultural products.

Commercial banks and finance companies in Malaysia which failed to comply with the various guidelines on lending are required to place with Bank Negara Malaysia, deposits equivalent to the amount of their shortfall. These are kept for one year at a penalty interest rate deemed appropriate by the Bank. The funds will then be rechanneled to institutions that could meet the targets.

In Nepal, banks which failed to invest at least 8 per cent and 25 per cent of their deposit liabilities on priority and productive sectors, respectively, are required to deposit the undisbursed amount with the Nepal Rastra Bank at no interest rate. Otherwise, banks and other financial institutions will be liable to pay a penalty rate equivalent to current refinance rates. Moreover, since June 1980, banks have been instructed by the Nepal Rastra Bank to charge a penalty rate of 16 per cent for the misuse of credit extended to the priority sectors. This directive is meant to discourage the misappropriation of credit intended for the priority sectors which was obtained at low interest rates.

In the Philippines, the system of incentives and penalty in the implementation of selective credit policies is lodged in the rediscounting window. In terms of incentive, funds for relending to priority activities are provided by the Central Bank of the Philippines to banks at lower than market rates so as to give them attractive spreads. On the other hand, a penalty rate equivalent to the difference between the minimum interest rate on emergency advances plus 4 per cent and the rediscount rate of their loans is charged to banks for any of the following violations of rediscounting regulations:

- a) ineligible or unacceptable collaterals are used by banks as security for rediscounted loans;
- b) non-negotiation of letters of credit within the specified period in the case of rediscounting of export bills;
- c) non-remittance or delayed remittance of loan collections.

To encourage commercial banks to channel more funds to priority sectors, the Bank of Thailand includes commercial banks' performance in lending to such sectors as one of the criteria in allocating rediscounting credit lines. On the penalty side, district branches of commercial banks which cannot fully meet the requirement of extending credit to district residents are asked to deposit an amount equivalent to the shortfall to the Bank of Thailand, without interest, or to hold government securities equal to 4.5 times of the amount, which could not be counted as part of their required reserves.

Use of moral suasion

The Central Bank of Sri Lanka makes use of moral instead of incentives and penalties, in persuading commercial banks to allocate funds to the vital sectors specified in the annual credit plan. The discussion that the central bank conducts with the individual commercial banks before the credit plan is prepared and the Governor's monthly meetings with the have provided a valuable forum for conveying objectives of the plan. In fact, the commercial banks are active participants in the formulation of the credit plan as they prepare and submit their own credit plans, which include sources and sectoral allocation of credit. Thus, the resulting national credit plan in Sri Lanka is an aggregation of the individual credit plans of the commercial banks. This practice of involving the commercial banks in the preparation of a directive which they have to implement contrasts with some credit allocation instructions in other countries which banks get to know only on the day of their announcement or issuance.

Setting up a separate monitoring and evaluation system

The fact that greater focus has been placed on certain sectors or activities of an economy has made it academic for the central bank to look closely into their financing situations. Moreover, penalties or sanctions for non-compliance of selective credit measures could not be imposed without a monitoring and evaluation exercise, in the same manner that such exercise is needed in granting them incentives for complying with the selective credit requirements.

While the monitoring and evaluation of selective credit policies by the South-east Asian central banks can be said to be subsumed in their regular examination and supervisory functions, it is worthy to note that two central banks conduct a separate and formal exercise for their selective credit measures. These are Bank Negara Malaysia and the Central Bank of Sri Lanka. separate monitoring and evaluation done by both central banks highlight the importance they place on these selective credit schemes which, in turn, make the commercial banks pay closer In addition, the separate and attention to these measures. regular monitoring and evaluation give the selective credit measures a flexible character, allowing for changes in the credit set and the introduction of other administrative targets improvements.

As already mentioned, the implementation of selective credit policies in Malaysia is mainly undertaken through the issuance of lending guidelines to commercial banks and finance companies annually. The issuance of lending guidelines, usually made in the first quarter of the year, is preceded by a review of the previous guidelines. The review takes into account, among others, the lending performance of commercial banks and finance

companies to the priority sectors during the previous year. If it has been found that bank credit to certain priority sectors had already generated momentum, lending guidelines to such sectors would no longer be issued. Otherwise, the specific lending directive is allowed to continue, and if necessary, even made more stringent. The various ceilings on interest rates are also reviewed and revised, if need be, to align them closely to the cost of funds in the open market. Moreover, during the review of the guidelines, new measures may be introduced to favour those sectors identified by the Government as priority and require more bank credit.

The Central Bank of Sri Lanka monitors the progress of the National Credit Plan on a quarterly basis. These monitoring meetings are done on an individual commercial bank basis and serve as a forum in discussing problems of both parties in the implementation of the plan. Whenever there is a deviation from the planned targets in the credit plan, the Central Bank of Sri Lanka takes corrective measures with the collaboration of commercial banks. Moreover, in the formulation of the next annual credit plan, the previous credit plan is evaluated in terms of its targets on the aggregate and individual bank basis, and sectoral and purpose-wise distribution of total credit.

Limitations of Selective Credit Instruments

Aside from identifying the conditions conducive to the implementation of selective credit instruments, the awareness of their limitations could also be useful for central banks and monetary authorities. A prior recognition of the drawbacks of certain selective credit instruments could serve as a signal to seek alternative measures or even abandon this type of monetary policy strategy altogether in favour of other means, say fiscal

or foreign exchange policy. It should be noted, however, that the disadvantages encountered by a central bank in implementing a particular instrument need not be experienced by other monetary authorities, as the situation in every country is different. Hence, the limitations of some selective credit instruments as borne out by the experiences of central banks in South-East Asia, Latin America and Africa 15/ are discussed in this section to serve primarily as points for consideration in their actual implementation.

Preferential rediscounting

It was said that since credit is fungible it is only possible to regulate the channel of credit, but not its end use. In view of this, the effectiveness of preferential rediscounting in reallocating credit is questioned. For instance, the rediscount made by a bank on a loan extended to a farmer does not guarantee that the proceeds of the rediscount will be similarly employed. Once the funds are obtained from the central bank, they become indistinguishable from other funds, and can be lent for any purpose. And if the funds are borrowed to

^{15/} Some details on the experience of Latin American countries were given by Dr. Ralph A. Young in his lecture "Direct Control of Bank Lending and Selective Credit Control," delivered for the Fourth SEANZA Central Banking Course held in Japan from April to June 1962, published in SEANZA Lectures by the Bank of Japan. On the other hand, some experiences of African countries, particularly on agricultural credit can be found in Agricultural Credit and Finance in Africa, by Leonard F. Miller and published by The Rockefeller Foundation.

correct a reserve deficiency, it is difficult to ascertain the preferred or "discouraged" loan that it was necessitated the recourse to the central bank. Tracing use of the proceeds of the rediscounted loan is more difficult. A farmer, for instance, could have obtained a loan for the purpose of buying fertilizers but he could use part all of it for a different purpose. Thus, selective rediscount rates could be reported to have a positive impact on statistics of bank loans by priority sectors, but not on actual This particular problem highlights the need for spending. central bank to tighten on the compliance aspect of its selective credit measures. One solution adopted is to put loans obtained in this scheme under supervised credit where technicians do only check on the disbursement of credit for the purpose were obtained, but also provide technical assistance like selecting better seeds and other inputs, in the case supervised agricultural credit. However, such programme ascertaining the end-use of the preferential credit entails substantial administrative costs.

It can also be seen that the impact of a preferential. rediscounting scheme upon the pattern of credit extension depends to a large extent on the degree of dependence of commercial banks on central bank credit. In a country where the commercial banks normally do not resort to central bank credit, or infrequently and on a small scale, a differential rediscounting rate structure will not influence the lending pattern. drawback of using the rediscount window for allocation purposes is that it is a passive instrument. Even in a case where banks make substantial access to the rediscounting window, the practice undermines the savings mobilisation role of banks and does encourage the infusion of more capital from stockholders. Instead, the cheap rediscounts make them dependent

central bank for funds, which have high inflationary impact. The Philippines has an experience on this, particularly on rediscounts of rural banks.

The rural banking system is an important component of the Philippines' agricultural credit delivery programme. of end-1984, agricultural loans of rural banks accounted for 86 per cent of their outstanding loan portfolio. 16/ Through the years, examination of the sources of funds of these banks showed their substantial reliance on borrowings, particularly from the Central Bank of the Philippines. From 1960 to 1971, the main source of funds of rural banks was stockholders' capital, which averaged 46 per cent of total fund sources. This was followed by deposits gathered which had an average share of 31 per cent Borrowings, on the other hand, during the twelve-year period. accounted for about 23 per cent. However, from 1972 onwards, the availability of cheap loanable funds from the rediscounting window and the special time deposits of the Central Bank, made borrowings as their chief source of funds. They constituted an average of 46.7 per cent of the total sources of funds during the Stockholders' equity as a source of fund took a second period. lower share, an average of 23.1 per cent of total, while deposit liabilities took 30.2 per cent.

This experience of the Philippines brings to the fore some policy issues which the monetary authorities have to consider in relying on preferential rediscounting as a means of

^{16/} Data taken from "Agricultural Credit Subsidy," by Purita F. Neri and Gilberto M. Llanto, <u>CB Review</u>, (October 1985) Vol. XXXVII, No. 10, Central Bank of the Philipines.

channeling credit to certain economic sectors. Particularly. such policy issues, as the desirability of tapping the central bank as a source of subsidised agricultural credit has to viewed against other objectives such as curbing inflationary pressures. strengthening the financial system and encouraging banks mobilise savings. The impact of preferential rediscounting on inflation merits special consideration since under this scheme, and in the absence of a total credit ceiling, commercial banks could continue to provide credit to traditional clients or borrowers not falling under government's priority list, in addition to serving the preferred sector. The net effect of this is expansion of the money supply.

Direct regulations on banks' credit portfolio

of the weaknesses of this instrument can illustrated by the experience of the State Bank of Pakistan with its mandatory annual targets for agricultural credit Commercial banks tended to be relatively lax commercial banks. in their efforts to meet the targets during the greater part of the year and concentrated their agricultural lending towards the far end of the year. This has resulted in less credit flowing to agriculture during the early part of the year and eventually, to short-falls in meeting the yearly targets. To discourage this tendency, the central bank required commercial banks to fullfil their annual credit targets to the extent of 50 per cent in first half of the year and the remainder during the next Moreover, portfolio requirements imposed on commercial banks, if effective, necessarily leave some low priority borrowers unsatisfied. This consequently provides an incentive for other bank types or non-bank financial institutions to evolve in order to cater to the needs of the non-priority sectors, thus, diluting the effectiveness of the portfolio regulation.

Advance deposits on imports

The drawback of this scheme can be traced again to the transferability of credit. Importers who also import essential goods and who are engaged in other business activities can borrow heavily for those activities and use part of these funds for making the advance deposits. It was suggested that imposing higher tariff duties or selective excise duties would be a better way of curbing imports of non-essential goods. Nevertheless, if the problem is believed to be of short duration and if tax measures are not feasible, advance deposit requirements may have some value in some situations. Their effectiveness, however, diminishes rather rapidly with the passage of time, and the problem of equity arises also.

Credit ceiling

This is not a desirable instrument in the long run since with the general growth of the economy, the ceilings have to be revised from time to time. Moreover, in so far as all banks do not grow at the same time, any approach through absolute ceilings may create some injustice. Apart from this, any categorisation of bank loan is bound to be arbitrary, to some extent. The central bank would have a cumbersome administrative task of deciding whether particular loans conform to the classification laid down by law.

Interest rate ceiling

Maximum rates of interest are set on preferred loans that banks may charge and the rates are often below those that would otherwise prevail. Low subsidised rates have considerable appeal but some doubts were raised as to whether

they actually benefit the intended parties. If interest rates on certain loans are kept below market rates, what happens is that banks cease to make such loans, so the intended beneficiaries of the measure end up receiving even less credit than before. This situation has happened even in the case of funds coming from the rediscounting window of the central bank which are available at very low rates. The experience of Sri Lanka and some African countries on this particular selective credit technique may be cited.

A review of the agricultural credit programme of Lanka in 1966 by the Committee on Agricultural Credit led to the recommendation that the rate of interest on such lendings should be "worked out in such a way that the lending institutions should have an adequate margin to cover the additional administrative costs involved in operating the scheme as well as the high risks involved in lending to the rural sector." 17/ Despite this objective, however, the refinance rate for short-term cultivation loans was kept as low as 1-1/2 per cent by the Central Bank of Sri Lanka. This can be interpreted as an attempt to retain concessionary rates in agriculture. the maximum lending Thus, rate of commercial banks under this scheme was fixed at 9 per cent per annum, as compared to the market rate of 15-20 per cent per annum.

The experience of one of the leading commercial banks in Sri Lanka gives an indication of how this scheme has fared in

<u>17</u>/ see Y. A. Piyatissa, "Concessionary Interest Rates in Agricultural Credit: The Sri Lankan Experience," <u>Staff Studies</u>, Vol. 12, No. 2 and Vol. 13, Nos. 1 & 2, Central Bank of Sri Lanka.

inducing banks to lend to the rural sector by adequately compensating for the lenders' risk. The high default rates and administrative costs that the People's Bank incurred seem to suggest that it cannot afford to operate the scheme even with the concession on interest rate. The People's Bank had estimated that it would have to achieve a recovery rate of 92.8 per cent to ensure that they incur no capital loss on the loans advanced under the scheme, a rate which was not achieved. In the end, this commercial bank became disenchanted with the scheme.

A seminar on agricultural credit in Accra, Ghana $\underline{18}/$ has summarised the arguments against subsidising credit, as follows:

- 1) Interest rates in farmer credit programmes that are kept very much lower than the rates charged in other sectors of the economy create a situation where the cheap credit is likely to be siphoned off into investments which have little to do with farm development.
- 2) The farmer's investment policies may be distorted since the true cost of capital is not reflected in his transactions. Cheap credit may cause wasteful use of capital and even premature consumption, thus reducing capital formation at the village level.

^{18/} Food and Agricultural Organization, Agricultural Credit in Africa. Report of the Seminar on Agricultural Credit for Small Farmers in African Countries, Accra, Ghana, December 1973, pp. 15-16.

- 3) When interest rates are subsidised, demand for credit will exceed supply and rationing may be necessary. Inevitably, this rationing places an additional burden on the credit institutions. Moreover, when credit is rationed, the smaller farmer is crowded out by those who have more influence with the credit suppliers.
- 4) There is always the danger that a credit institution lending money at a subsidised rate of interest is somewhat at the mercy of its political powers and may find itself insufficiently compensated. In these circumstances, it may be forced into a situation where it concentrates on large loans to established farmers in order to economise, and it may find difficulty in raising capital partly because of its inability to offer attractive rates on deposits.
- 5) Subsidised interest rates have a tendency to hinder the integration of capital markets, thus decreasing the efficiency of the economy by restraining the transfer of resources.

Other Points to Consider in Implementing Selective Credit Policies

Coverage of selective credit policies

When selective credit regulations are applied to only one type of financial institution, over time, other types evolve designed to evade the particular regulations or to meet the needs of other non-priority sectors. This does not only reduce the importance of the lender which has to implement selective credit policies but also reduces the impact of the policies themselves. The foregoing suggests that the larger the set of lenders covered

by selective credit policies the greater is their impact. However, two points along this line have to be considered. First, while extending selective credit controls to all lenders increases their effectiveness, this also implies an increase in the administrative costs. Second, even if selective credit controls were extended to all institutionalised lenders this would still leave direct lending between surplus and deficit units as a potential offset to the controls. 19/

Costs of implementation

Other economists have come up with another test of the effectiveness of selective credit policies. They would like to subject these measures under some kind of a cost-benefit analysis. They believe that given the need for government intervention to direct resources to a particular sector, the case for using selective credit policies must be made on the grounds that they accomplish the objective more efficiently, that is, the benefits per unit cost are higher than other means of reallocating real resources. Some of the social costs imposed by selective credit policies are as follows 20/:

a) administrative costs of the regulatory agency charged with implementing the selective credit policy and supervising its compliance;

^{19/} William L. Silber, op. cit., p. 104.

^{20/} Ibid., pp. 115-120.

- b) costs to the regulated in complying with the selective credit measures;
- c) resources of the private sector devoted to evading selective credit policies; and
- d) welfare costs associated with the inefficiencies imposed by the selective credit policy.

The administrative costs are the actual costs of the central bank or other regulating agency charged administering the programme or the controls. One distinctive characteristic of selective credit policies, especially in the context of the SEACEN countries, is that their effectiveness hinges a lot on the compliance of the regulated party, commercial banks. This can be explained by the fact that most commercial banks in these countries would not, on their own. venture into some areas of financing deemed highly preferrable by the government, hence, the need to impose selective credit measures such as "forced" investment schemes and lending guidelines. In the case of preferential refinancing schemes, the concessionary refinancing rates have a subsidy element which is another cost to the central bank.

The costs to the regulated, in terms of record-keeping, etc., is not easy to measure. It should be possible to get such numbers by asking the affected institutions for the man-hours, etc., devoted to such tasks. Moreover, lending to some areas which are not traditionally commercial banking lines, such as agricultural credit, may entail additional cost in terms of training bank personnel.

The remaining two categories of costs, cost of evasion and the welfare costs, (in terms of capital market efficiency) are seen as the major problems of selective credit policies. The structural readjustments imposed on financial institutions in an effort to evade selective credit controls were cited as costs of evasion. While there is no estimate of such costs it is believed that they are not negligible. Interference with the efficiency of the capital market is also viewed as a major cost of selective credit policies. Capital mobility is impaired by portfolio restrictions and the regulation of interest rates eliminates their usefulness in the allocation of resources. 21/

Impact on profitability of financial institutions

Any selective credit policy, measure undertaken through financial institutions must not only be able to channel funds into appropriate areas in the long run, but also allow a reasonable level of profitability so as to make it possible for them to compete for funds and thus maintain an adequate flow of funds into these sectors. In this connection, it was suggested that the market should be allowed to determine interest rate in conjunction with other selective credit policies such as direct portfolio regulations so that it retains its value as an allocator of funds. It was contended that as long as the ultimate objective is quantity or availability of credit in a particular use, it is best to retain market-determined interest

^{21/} see Meltzer, "Aggregative Consequences of Removing Restrictions," and Milton Friedman, "Controls on Interest Rates Paid by Banks, <u>Journal of Money, Credit and Banking</u> 2 (1970), pp. 15-32.

rate so that consumers and producers and borrowers and lenders are using funds and resources efficiently.

<u>Duration</u> of implementation

Studies undertaken in the United States regarding the of substitutability between securities in portfolios showed that the short-term elasticities substitutability are significantly lower than the long-term elasticities. 22/ This suggests that the initial impact of selective credit policy will be larger than the long-run impact. Thus, based on this finding selective credit policies have their greatest potential usefulness within a cyclical context rather than secularly. Once a selective credit policy is implemented, time tends to erode the impact of such policies by providing an opportunity for extensive portfolio adjustments and the creation of means for evading the controls.

<u>22</u>/ see William L. Silber, <u>Portfolio Behavior of</u> <u>Financial Institutions</u> (New York: Rinehart and Winston, 1970).

V. CONCLUSIONS

The experiences of central banks in several parts of the world with selective credit policies have been characterised with varying degrees of success, and even failures. In England, West Germany and Colombia, there exist documented cases of their ineffectiveness which led to their abandonment after some years implementation. Even in a country like the United States advocates allocation of resources through market forces, selective credit policies particularly those favouring mortgage credit are still in use. In the SEACEN countries and other developing countries, it was shown in the earlier sections of this study that selective credit policies, mainly in the form of preferential refinancing scheme and direct credit portfolio regulations, continue to be extensively used by their monetary authorities to direct credit to preferred and underprivileged As viewed by the South-east Asian central banks themselves, their selective credit policies have succeeded, to a certain extent, in directing the flow of credit to these areas.

In the academic front, the efficacy of selective credit policies in allocating financial and real resources has elicited a number of theoretical and empirical studies, notably in the United States. There is, however, no unanimity in their findings and conclusions. In certain studies, reduced-form econometric models were used to test whether the use of selective credit policy has caused changes in resource allocation or the level of production in the intended directions and time periods. Even then, the use of reduced-form tests has been criticised since such tests cannot handle structural changes. On the other hand, testing selective credit policies' efficacy under a structural framework is believed to lead to a far broader range of questions

such as the appropriate transmission mechanism, the value of general versus partial analysis and the usefulness of "incomplete tests", that is, tests that examine only some of the links connecting policy instruments and policy goals. Other economists have also questioned the use of arguments and conclusions from other areas of economics to support positions for or against these policies. Thus, existing academic studies on the subject have not shown strong confirmation of the disadvantages of selective credit policies while little proof has been given of the social gains expected from them and it has not been established that certain goals can be best achieved through selective credit controls.

Notwithstanding the lack of conclusive theoretical selective credit policies evidence on their effectiveness, continue to be employed as major instruments of central banks in They are deemed to be suitable in these developing countries. are characterised with imperfect which conditions and have less developed financial structures. continued reliance on selective credit policies in redirecting credit resources, even in developed countries, may be traced There is no doubt that partly to their inherent advantages. selective credit policies have provided monetary authorities with an additional instrument. Their advantage is best illustrated in a situation where the total amount of credit that is compatible with the stabilisation objective of the central bank (internal or external equilibrium) tends equilibrium distributed in such a way as to jeopardise the development of Then, the monetary authorities certain sectors of the economy. whose only tool is the monetary base will be faced with the dilemma of whether to pursue the objective concerning the total amount of credit or whether to pursue those relating to the composition of credit. With selective credit policies, this dilemma can be solved since they influence the composition or distribution of credit without touching on control over aggregate credit.

Selective credit policies can also deliver results at a speedier pace. Indirect or general instruments of monetary policy rely upon the behaviour of thousands of participants in the economy and considerable time must pass before the results are obtained. In contrast, selective credit policies which are basically administrative handling of incentives or disincentives do not rely on spontaneous behaviour since they directly bind already-identified participants.

The speed advantage is linked to the third: the greater precision of a selective credit control as compared to indirect action. If commercial banks are required to finance the purchase of 10,000 units of low-cost houses or to set aside 15 per cent of their loans to small scale industries annually, it can be expected that, with the exception of a few, the system will comply with those directives. Yet, when indirect instruments are used there is always a particularly marked deviation from what was forecast, as far as size and time necessary to achieve the objective are concerned.

However, every recognised strength of this credit allocation strategy can be matched with disadvantages by its critics. In addition, it is contended that implementing selective credit controls entails substantial administrative and welfare cost. Thus, a more pragmatic approach has been adopted by most of the authorities in the SEACEN region. Other policy instruments or methods of influencing the distribution and composition of financial and real resources are also employed to support, not to replace, selective credit policies. For instance, another direct approach to resource allocation taken is

subsidising or taxing output or all inputs to the activity that the government hopes to alter. The fiscal policy approach is also favoured because its results are more predictable. It is regarded as more efficient in that the producer's choice of an input combination is not distorted and is more likely to reflect true social costs. Furthermore, a fiscal technique in resource allocation lends itself to regular review or evaluation (in conjunction with the preparation of the annual budget) since it represents cost, either to the government or to the citizens.

The second credit allocation strategy which has been employed by the SEACEN countries, just like other developing countries, is the establishment of financial institutions whose operations are principally geared to meeting the financing needs of specific sectors. They are oftentimes referred to as specialised financial institutions since they concentrate their lending to certain segments of the economy or to specific productive activities. The central banks in these countries have assisted in creating specialised financial institutions, either through capital contribution and/or relaxing bank entry requirements.

governments of the SEACEN countries, including have also resorted to other avenues that their central banks, do not allocate credit directly to certain sectors but encourage the flow of funds to them. These take the forms of insuring and guaranteeing banks against losses on certain types of loans. Among the SEACEN countries, credit guarantee institutions and companies have been established by their crop insurance to reduce the risks involved in lending governments agriculture, exports and small enterprises, and increasing the flow of institutional credit to these sectors.

On the whole, the use of selective credit policies can be brought down to a single central issue: the intervention of the central bank in the financial intermediation It was shown in this study that the central bank does not only take a direct role in channeling credit to specific sectors. but also in supplying credit through rediscounting/refinancing window. This direct intervention approach has been justified by citing such reasons as imperfect conditions and underdevelopment of their financia1 Thus. structures. as long as these conditions exist, continued use of selective credit policies can be justified. This raises the question of what the central banks have been doing to improve the situation in the financial markets so as to allow price mechanism to govern the allocation of credit.

Impressionistic evidence as gathered from official discussions and reports and the record on recent policy decisions of monetary authorities in the SEACEN region indicates that selective credit policies are treated as interim measures while deliberate efforts are taken to eventually lead to a more marketoriented allocation of credit. The liberalisation deregulation moves initiated by the monetary authorities. particularly those relating to interest rates and loosening of functional distinction among financial institutions, point toward a desire to strengthen the role of financial institutions financial intermediation. Moreover, the role of the central bank in economic development in the long-run is viewed to take a less active stance-- from providing and directing the funds different economic sectors, to that of maintaining a stable price level and a manageable balance of payments position which are conducive to sustained economic growth. At the same time, the central bank succeeds in setting such a conducive economic environment, financial instruments and financial institutions

will flourish thereby facilitating the on-going institutional-building and promotional efforts of South-east Asian central banks in financial structure development.

On a more specific level, a review of the relevance and effectiveness of various selective credit measures is being undertaken by some South-east Asian central banks, especially in the context of the liberalisation and deregulation trend in the financial markets. In these evaluation execises, it may be worthwhile to consider, among others, limiting the scope and duration of preferential credit schemes and direct credit portfolio regulations. Indeed, if selective credit policy has to be an efficient and effective allocative device and live up to its name, there is a need for greater selectivity in its coverage and a move towards more definite, if not shorter, duration.

REFERENCES

- Bank Negara Malaysia. Annual Report series.
- Bank of Japan. <u>SEANZA Lectures</u> for the Fourth SEANZA Central Banking Course held in Japan from April to June 1962.
- Central Bank of the Philippines. Annual Report series.
- _____. CB Review. Vol. XXXVII, No. 10 (October 1985).
- Central Bank of Sri Lanka. National Credit Plans: 1982-1984 (Mimeograph).
- _____. Staff Papers, Vol. 12, No. 2 and Vol. 13, Nos. 1 and 2.
- Cotula, Franco and Tommaso Padoa-Schioppa. "Direct Credit Controls as a Monetary Tool," Banca Nazionale del Lavoro, Quarterly Review (September 1971).
- Dorrance, Graeme S. "The Instruments of Monetary Policy in Countries Without Highly Developed Capital Markets," IMF, Staff Papers, Vol. XII (July 1970).
- Eastburn, David P. "Federal Reserve Policy and Social Priorities," <u>Business Review</u>, Federal Reserve Bank of Philadelphia, November 1970.
- Federal Reserve Bank of Boston. <u>Credit Allocation Techniques and Monetary Policy</u>. Proceedings of a Conference Held in September 1983.

- Hodgman, Donald R. "Selective Credit Controls," <u>Journal of Money</u>, Credit and Banking, Vol. 4 (May 1972).
- Johnson, Omotunde E.G. "Credit Control as an Instrument of Development Policy in the Light of Economic Theory," <u>Journal of Money</u>, Credit and Banking (February 1974).
- Kane, Edward J. "Good Intentions and Unintended Evil: the Case Against Selective Credit Allocation," <u>Journal of Money</u>, <u>Credit and Banking</u> (February 1977).
- Khatkhate, D.R. and D.P. Villanueva. "Selective Credit Policies in Less Developed Countries: An Analytical Framework," IMF mimeograph (May 6, 1976).
- Mayer, Thomas. "Financial Guidelines and Credit Controls,"

 <u>Journal of Money, Credit and Banking</u> (May 1972).
- Miller, Leonard F. <u>Agricultural Credit and Finance in Africa</u>.

 The Rockefeller Foundation, August 1977.
- Molho, Lazaros E. "Loan Rates as a Selective Credit Control,"

 Journal of Banking and Finance, Vol. 8 (1984).
- Onoh, J.K. Money and Banking in Africa. New York: Longman, Inc., 1982.
- Padoa-Schioppa, Tommaso. "Selective Credit Policy: Italy's Recent Experience," Banca Nazionale del Lavoro, Quarterly Review (March 1975).
- Patel, I.G. "Selective Credit Controls in Underdeveloped Countries," IMF, Staff Papers (September 1954).

- Penner, Rudolph G. and William L. Silber. "The Interaction Between Federal Credit Programmes and the Impact on the Allocation of Credit", American Economic Review (Dec. 1973).
- Rao, D.C. "Selective Credit Policy: Is It Justified and Can It Work?", <u>Journal of Finance</u>, Vol. 27, No. 2 (May 1972).
- Rao, D.C. and Ira Kaminow. "Selective Credit Controls and the Real Investment Mix: A General Equilibrium Approach,"

 <u>Journal of Finance</u> (December 1973).
- Saulnier, R.J. "An Appraisal of Selective Credit Controls,"

 <u>American Economic Review (May 1952).</u>
- Silber, William L. "Selective Credit Policies: A Survey," Banca Nazionale del Lavoro, <u>Quarterly Review</u> (December 1973).