

**KOBE  
ECONOMIC & BUSINESS  
REVIEW**

**14th  
ANNUAL REPORT**



**THE RESEARCH INSTITUTE FOR  
ECONOMICS AND BUSINESS ADMINISTRATION  
KOBE UNIVERSITY**

**1967**

KOBE  
ECONOMIC & BUSINESS  
REVIEW

14th  
ANNUAL REPORT

THE RESEARCH INSTITUTE FOR  
ECONOMICS AND BUSINESS ADMINISTRATION  
KOBE UNIVERSITY

1967

## CONTENTS

	Page
A Return on the Confirmed Settlement of Accounts.....Susumu WATANABE	1
Problems of Regional Industrial Development Relating to National Planning in Japan.....Minoru BEIKA	11
The Development of Japanese Trade with the British Commonwealth in Asia .....Fukuo KAWATA	21
On the Kihansen (Japanese Wooden Coastwise Vessels) .....Seiji SASAKI	41
Approaches to Company History.....Tadakatsu INOUE	49
Cumulated Cost Ratios for the ECAFE Countries .....Nobuko NOSÉ	55
International Liquidity Controversy in Japan (1).....Masahiro FUJITA	73
Investment Criterion for Maximizing the Rate of Capital Accumulation .....Hikoji KATANO	87
Peculiarities of Maritime Labor —with special reference to the supply of maritime labor— .....Hiromasa YAMAMOTO	93
Los Estudios Del Brasil En El Japón —Con Referencia a las Ciencias Sociales— .....Yoshiaki NISHIMUKAI	107

## A RETURN ON THE CONFIRMED SETTLEMENT OF ACCOUNTS

Susumu WATANABE

### I

Article 74 of our Corporation Tax Law provides that a domestic corporation shall file a return within two months after the closing date of each accounting period, showing the amount of the income of the accounting period concerned which is the basis of assessment and the amount of the corporation tax on this income on the confirmed settlement of accounts. "The confirmed settlement of accounts" in this provision means the settlement of accounts of the accounting period at the general meeting of shareholders or by the whole body of partners or by others corresponding to them as the case may be, and "a return on the confirmed settlement of accounts" means to calculate on a return the amount of the taxable income according to the Corporation Tax Law provisions on the basis of the business profit which appears on the approved settlement of accounts and to show the taxable income so calculated and the difference between the business income and the taxable income.

In this way our Corporation Tax Law depends upon the confirmed settlement of accounts, i.e., the amount of the taxable income is derived from the business income on the confirmed settlement of accounts (we may call this principle that of dependance on the confirmed settlement of accounts). To understand the meaning of this principle, the following points should be noted.

(1) The tax law does not require a corporation to close its books so as to reflect the provisions of the tax law, i.e., to settle accounts so that the computed annual profit shall directly show the taxable income. In other words, the settlement of accounts of any corporation is primarily made for other than tax purposes, then the amount of the taxable income is derived from the annual income so determined, with necessary adjustments for tax purposes added to it in a return. It is a matter of course that the tax law must not require any special accounting treatment of its own to be included in the settlement of accounts of a corporation, since the books are primarily closed for other than tax purposes. The tax law once granted a special favor with

the effect of deferring tax payments on condition that "the reduced entry" be made in the settlement of accounts. This was an improper interference of the tax law with business accounting but the condition has been greatly improved now.

On the other hand, not a few cases are encountered where accounting practices are influenced by the tax law so remarkably that the accounting treatment according to the tax law is followed, although such a treatment is not required by the tax law. Such practices may be due to considerations on the part of a corporation that since there is no accounting treatment shown in concrete form in our Commercial Code, it would be better to settle the accounts in accordance with the tax law from the start in order to avoid necessary adjustments in a return. But this is not the proper way of thinking, because to settle accounts in accordance with the tax law is to consider that the highest aim for the settlement of accounts is the tax purpose to compute the amount of the corporation tax. In Japan, we find the word "tax bookkeeping", which is considered to mean a system of bookkeeping adopting the requirements of the tax law. But we insist that there should not exist such a form of bookkeeping, because the requirements for the calculation of the taxable income under the tax law should not have a place in everyday practices of bookkeeping or in the settlement of accounts.

(2) The settlement of accounts of a corporation is primarily made by the requirement of the Commercial Code regardless of its necessity for tax purposes. Directors are liable to submit the balance sheet, the business report, the income statement and the proposal on the appropriation of profit to an ordinary general meeting for approval, and to publish the approved balance sheet without delay. Corporations are required to settle their accounts in accordance with this provision of the Commercial Code, and the business profit which becomes the starting point for the calculation of the taxable income is the result of the income computation to comply with such requirements. Since the profit under the Commercial Code seems to have the character of disposable profit, the adjustment in a return is made to derive the taxable income from the disposable profit under the Commercial Code. Accounting provisions of our Commercial Code are no more than broad ones concerning the valuation of property without covering details of the accounting procedures. The accounting practices of a corporation, therefore, may have been influenced not only by the Commercial Code but also by our Corporate Accounting Principles, and the accounting provisions of the Commercial Code in turn may have been subject to the influence of the Corporate

Accounting Principles. It should be noted, however, that it is the accounting practices or settlement of accounts under the Commercial Code that the tax law has adopted as a social institution for the basis of calculation of taxable income. Namely, when there is any sphere where the accounting requirement of the Commercial Code does not concur with that of the Corporate Accounting Principles, it is the settlement of accounts under the Commercial Code and not that under the Corporate Accounting Principles that has a direct relationship with the principle of dependence on the confirmed settlement of accounts under the tax law. This point should be clearly understood. Even when a certain accounting treatment of a corporation is regarded as improper from the viewpoint of the Corporate Accounting Principles, the tax law should start from that accounting treatment to arrive at the taxable income, provided that the treatment is considered to be recognized under the Commercial Code. Even if the treatment is not justified by the Corporate Accounting Principles, the tax law does not directly connect with the Corporate Accounting Principles without taking the interpretation of the Commercial Code into consideration. Misunderstandings on this point have given rise to a host of attacks—which should have been directed to the accounting provisions of the Commercial Code—on the tax law.

In short, the settlement of accounts of a corporation is made because of its necessity to the Commercial Code before that of income tax purposes. The calculation of the taxable income should accept the result of the settlement of accounts as its starting point, and the special accounting treatment necessary for the computation of taxable income should not be included in accounting practices or the settlement of accounts of a corporation.

## II

Our Corporation Tax Law determines the taxable income relying upon the confirmed settlement of accounts. There are three kinds of cases, they are (1) items whose figures included in the confirmed settlement of accounts are also used without modification for the purpose of calculation of taxable income, (2) items whose figures in the closed accounts are allowed to be modified to calculate taxable income, and (3) items whose figures in the closed accounts are forced to be modified for the determination of taxable income. These adjustments or modifications are made in a return, so that the above-mentioned items can be grouped into the following three classes from the standpoint of “the adjustment in a return”, namely (1) unadjustable items, (2) adjustable items and (3) items to be adjusted.

(1) As to unadjustable items, amounts shown in the settlement of accounts are used as they are for the determination of the taxable income and are not allowed to be changed. The following two kinds of cases belong to this group.

(A) When there are two or more proper accounting methods and a choice is allowed, the method used in the confirmed settlement of accounts must also be applied to the calculation of the taxable income. This is stated in the Notification concerning the Treatment of the Corporation Tax Law as follows.

When with respect to items relating to the computation of income of a corporation (excluding items subject to special provisions in the tax law for the computation of income) there are two or more accounting methods which are recognized as appropriate for the determination of the business profit by the Commercial Code or other regulations concerning corporate accounting and by the generally accepted proper principles of business accounting and which are also regarded as reasonable for the calculation of the taxable income (including those methods which are regarded as proper for the computation of business income and become reasonable for the determination of taxable income provided that the necessary adjustments are made in a return), and when the corporation has applied one of these methods in the computation of the business profit approved by the general meeting of shareholders, the same method should be applied in computing the amount of the taxable income. In this case, therefore, the following results would follow.

(a) Even when a return is filed using a different method in computing the taxable income from that used in the settlement of accounts, or even when a request for rectification or an appeal of dissatisfaction is made on the ground that a different method should have been applied, the application of the different method does not come to be recognized in computing the taxable income of the business year.

(b) When a method used by a corporation comes to be recognized as proper or reasonable on condition that it is consistently applied every business year, that method should also be consistently used for the computation of the taxable income of each business year, except when there is a reasonable excuse to justify a change in method.

In short it is required that where there are two or more appropriate accounting methods and a corporation has selected one of them in the settlement of accounts, the same method should be applied for income tax purposes, too, and that when the consistent use of a method is called for, the

same method should continue to be applied. These claims of the tax law are so natural that there is no reason to recognize for tax purposes the use of other methods than those applied in the confirmed settlement of accounts.

(B) Where the determination of the amount of an item leaves room for selection on the part of a corporation under the tax law, the amount shown in the confirmed settlement of accounts is taken to be an expression of the company and the same amount is used for the computation of the taxable income. To take an example, the tax law stipulates the maximum limits of depreciation allowable as expenses, and a company is allowed to include in deductions any amount within the maximum limit as depreciation expense. And as to the amount which is to be credited to various kinds of allowances and to be included in expenses for tax purposes, the tax law only sets the maximum limits for them. A corporation may decide, as occasion demands, the amount to be credited to allowances within the maximum limits. (As the tax law sets uniform limitations in computing allowable depreciation charges as well as credits to allowances, the problem arises as to whether these maximum limits may be more or less than necessary for individual business, which, however, only means that these maximum limits must be most properly decided taxwise and not that the principle of dependence on the confirmed settlement of accounts as such is open to criticism.) The law requires these item to be treated as expenses in a corporation's accounts, namely, to be included in expenses or losses in the confirmed settlement of accounts (The Corporation Tax Law §2-26). For instance, the depreciation allowable as a deduction in computing the taxable income of each business year is that part of the depreciation treated as an expense of the year by a corporation within the limit calculated according to the provision of the Corporation Tax Ordinance.

In these cases, the amounts treated as expenses in the confirmed settlement of accounts are regarded as expressing the final intention of a corporation. Here we find no reason to recognize for income tax purposes different amounts from those in the confirmed settlement of accounts. There is no question as to the existence of such items as the tax law observes the decided intention of a corporation in the confirmed settlement of accounts.

However, in cases of governmental subsidies, gains on insurance claims etc., the tax law allows a corporation to treat them as expenses or losses using "the reduced entry" or making a credit to a special allowance. In these cases it is doubtful whether it is proper to require that they be recorded as expenses (or losses) in business accounting, because the settlement of accounts are



primarily made for the purpose of the Commercial Code and if it is not intended by the Commercial Code to treat them as expenses (or losses), such a demand will be an improper interference of the tax law with business accounting. Yet at present, the understanding from the viewpoint of the Commercial Code concerning acquisition prices of property in cases of governmental subsidies, gains on insurance claims, exchange of fixed assets and so forth is not clear and this problem remains to be reviewed and solved in the future.

(2) Adjustable items mean those items which may be adjusted in a return. For instance, the provision of excluding dividends received by a corporation from revenues may only be applied to a case where a final return shows both the amounts of dividends to be excluded from revenues and the details of its computation. And the amount to be excluded from revenues is limited by the amount so stated in a return (The Corporation Tax Law §23-(4)). Substantially the same provisions were found on tax-exemption of income from the manufacture of new staple commodities. These items are naturally a part of the business income, and they are shown as such in the confirmed settlement of accounts.

The tax law allows these items included in the confirmed settlement of accounts to be adjusted in a return, taking those adjustments in a return to be an expression of the intention to have the provision of excluding them from revenues or of tax-exemption applied. In other words, the prescription of exclusion from revenues or tax-exemption is applied to these not automatically but on condition that adjustments have been made in a return.

(3) Items to be adjusted are those whose amounts in the confirmed settlement of accounts must be adjusted without fail for income tax purposes.

(A) When the tax law expressly stipulates the exclusion of an item from expenses (or losses) or sets limit on the amount of an item includable in expenses (or losses) and a treatment not conforming to the stipulation has been made in the confirmed settlement of accounts, an adjustment should be made in a return. To take an example, the tax law excludes penalties and fines from expenses or losses (The Corporation Tax Law §38-(2)-5). If a corporation, therefore, treated these items as expenses in the settlement of accounts, an adjustment should be made in a return. Further, various kinds of allowances are limited in their maximum amounts, so that when a corporation has credited more than the limit, the excess must not be included in expenses for income tax purposes, leading to an adjustment in a return. It is quite free to treat penalties or fines as expenses or to set an allowance in excess

of the maximum limit prescribed by the tax law in business accounting. A corporation may treat as expenses the amounts that it thinks are properly chargeable to the period, and when these amounts are over the limits prescribed by the tax law, the excess will be refused as expenses (or losses) taxwise, and nothing more.

The tax law demands inventories to be valued on actual costs, stipulating factors and amounts which should be included in acquisition costs of inventories. When the computation of acquisition costs by a corporation does not comply with the requirements of the tax law, an apportionment of the cost variances must be made in a final return, except when the provision of the Corporation Tax Ordinance §32-(2) is applied (i. e., when the computed cost of inventories manufactured by a corporation is in excess of the amount stipulated by the tax law and yet the cost has been calculated by a proper cost accounting, that cost is regarded taxwise as the acquisition cost of those inventories). This case also belongs to category (A).

(B) Even when there are no express stipulations in the tax law, adjustments should be made in a return in order to reflect the true state of affairs, viz., when the closed accounts of a corporation should fail to reflect objective facts, they must be adjusted to reflect them. For example, in cases where some sales are omitted, fictitious purchases or fictitious debts are recorded or the amount of inventories are undervalued, adjustments are required in a return for the purpose of calculating the correct taxable income. These matters should have already been properly adjusted and made correct in the settlement of accounts, but, if not, they should be adjusted in a return.

Those matters explained in (3) (B) are different in nature from those explained above from (1) to (3) (A), in the sense that the latter consists of correct figures before adjustments are made. At any rate, in cases (3) (A) and (3)(B) adjustments should be made, otherwise, they are subject to rectification by tax authorities.

### III

Article 62 of the Corporation Tax Law stipulates that when the revenues and expenses on all the installment sales of inventories made in a given year have been calculated adopting the installment basis prescribed in the Corporation Tax Ordinance and shown in the confirmed settlement of accounts, the amounts of the revenues and expenses so calculated are treated as revenues and expenses in the computation of the taxable income. By this sentence, it seems that the only recognized method taxwise is to show separately revenues

and expenses of that year concerning the installment sales. But besides this method, the procedure of deferring the profit or loss on installment sales as unrealized and transferring that part of the unrealized profit or loss which corresponds to the amount of receivables due within the year to a realized profit or loss of the year, is also recognized by the Notification concerning the Treatment of the Corporation Tax Law. This method, however, has nothing to do with the adjustment in a return. It is recognized as a bookkeeping method concerning installment sales.

As to the adjustment in a return, the Notification concerning the Treatment of the Corporation Tax Law states as follows :

When a corporation applies Article 62 of the Corporation Tax Law (stipulating the year to which revenues and expenses on installment sales belong) in recording the revenues and the expenses on installment sales of inventories, the revenues and the expenses on all the installment sales of inventories in a given year should be calculated using the installment basis prescribed in Article 119 of the Corporation Tax Ordinance and shown in the confirmed settlement of accounts. But even if the accounting method of recording these revenues and expenses used by a corporation in its confirmed settlement of accounts should differ from that prescribed in that article, a corporation is able to apply Article 62 of the Corporation Tax Law on condition that it should make adjustments in a final return in order to bring about the coincidence, in cases where the difference occurs from the following causes and the like.

(1) A corporation took the method in which any selling commission in computing profits or losses on installment sales is not deducted.

(2) A corporation took the method in which only the amount of the receivables due within the business year but not the amount of money received before the due date is taken into account, in calculating the revenues and expenses on installment sales.

The installment basis under the tax law is not same as the collection basis but a mixture of the collection basis and "the due date basis".

The above ruling is quite proper in that it recognizes an adjustment in a return in some cases where the installment basis prescribed in Article 119 of the Corporation Tax Ordinance is not used in the confirmed settlement of accounts. In this case, the accounting method of a corporation "is regarded as proper for the computation of business income and becomes reasonable for the determination of taxable income provided that the necessary adjustments are made in a return". But not all the methods differing from Article 119 of

the Corporation Tax Ordinance can find its way to an adjustment, but the requirement here is that "in cases where the difference occurs from the following causes and the like". Perhaps it will be necessary that such an accounting method as is recognized as appropriate under the generally accepted proper accounting principles be used. But how about the case when the method used in the confirmed settlement of accounts is based on only the money received within the business year but does not take into account the amount of receivables due but not yet received. This case is not specifically referred to as adjustable in a return, but we think that the adjustment in a return is allowed in this case as coming under "the following causes and the like". An explanation is made that the reason why such a case has not been specifically cited is that in reality no corporation adopts such an accounting method, viz., it is said that the pure collection basis cannot be found in accounting practices in Japan. If so, the situation is serious, because it is an evidence that accounting methods under the tax law have a greater influence over the practice of accounting than necessary, and other proper methods have not gained a firm foothold yet. This tendency should be amended so that the confirmed settlement of accounts based on the generally accepted method should be recognized as a starting-point for the computation of the taxable income, and the requirements for the tax accounting should be fulfilled in a return.

## PROBLEMS OF REGIONAL INDUSTRIAL DEVELOPMENT RELATING TO NATIONAL PLANNING IN JAPAN

Minoru BEIKA

### I

The present regional development policy by the Government was formed relative to the national plan whose aim is to double the national income within a ten-year period starting from 1961. The objective of the development policy is to prevent excessive concentration of industrial activities in the three central metropolitan regions of Tokyo, Osaka, Nagoya and their surroundings, and to reduce the considerable difference in the per-head income in all regions in the country, through industrialization of the underdeveloped districts. The Government has selected 14 new industrial development districts, separate from the central districts, and 6 special industrial districts adjoining the central districts. Because of the recent rapid urbanization due to high industrialization, traffic congestion, disorganized landuse, and many other difficult economic and social problems in the central metropolitan regions have occurred. In the original plan only five or six districts were expected to be preferentially helped by government finance, tax reduction or exemption, and more public investment, but because of political pressure the original plan was distorted. Since, half of the planned ten years have elapsed.

The actual results for these five years have shown a distinctive situation, different from the regional development policy. The relative share of industrial activities in the central metropolitan regions have further increased, much more than in the other local regions. The working forces have moved from the local districts to the central districts. We have been confronted by problems caused by the excessively high density of population in the central districts and of the excessively low density in the local districts. Therefore the existing policy for regional development must be reexamined now, to further the chances for the new economic five-year national plan starting from 1967.

### II

The interim report for the reexamination of actual regional industrializa-

tion was recently published by the Economic Planning Department of the Government. Some important points of the interim report will be discussed here and then the writer will approach the problems of regional industrialization more deeply than the report.

Based on the report, the industries can be classified in to two kinds; the stationery (foot-tight) industries and the foot-loose industries. The former, depend chiefly on special location factors, that is seaside oriented, material-oriented, energy-oriented or some other special-factor-oriented, and so their industrial plants have located not only in the central industrial districts, but also in some of the new industrial development districts which have been designated for this purpose, due to their location factors. The iron and steel, petrochemical, wooden, pulp and paper, and ship building industries belong to this type of industries, and most of them are found in the coastal regions.

The latter, foot-loose industries, in the case of Japan, have concentrated chiefly in a few central industrial districts. The engineering, electric machinery and electronic industries which have had enormous growth recently belong to this type of industries. The plants belonging to the foot-loose industries, originally could be located relatively freely in any district, because they are high-added value industries and have relatively high transportability. But in Japan, these industries depend especially on their own agglomeration and related industries and tend to situate in certain areas which are in the central metropolitan regions.

These recent tendencies seemingly will continue in the near future, too. Therefore we can certainly expect to be confronted by more economic and social problems, that of urbanization in the central districts and underdevelopment in other local districts where the foot-loose industries can not be attracted. The present regional development policy has been a little too idealistic for actual industrial activities and real regional conditions. The decentralization of industries could not be realized as well as was expected.

Accordingly, the interim report has failed to include a revised policy of more realistic approach for the improvement of the present difficult situation in regional development, It is now being studied by a working group of the Economic Planning Department.

### III

Two opinions have been expressed for approaching these difficult regional problems. One is to place importance on actual tendencies and thus gradually to decentralize industrial activities from the central districts to thier sur-

roundings, and to endeavour not only to develop suburban districts, but also to redevelop urban districts of the central districts, according to plan. The other opinion is to emphasise the regional difference of per-head income, and the importance of solving the underdevelopment problems in the low income regions as before. Relating to the controversy between the two opinions, the writer has been interested in many experiences of regional development by European and American countries and some of the underdeveloped countries, after World War II.

The United Kingdom had been confronted with complicated regional problems of more efficiently developing industries in this competitive world and of solving the severe unemployment in the depressed areas of northern England and Scotland. France has greatly developed her industries chiefly in the central and the eastern regions near the EEC developing countries, while at the same time, she has regional development problems to be found in the southwest and western part of the country. Even the United States of America which has had continued prosperity 60 months from 1961, has a considerable number of depressed areas affected by technical innovation, and has taken strenuous policies for these regional problems, since the last half of the 1950's.

We can find similar cases in other underdeveloped countries, for example India and Brazil. Brazil has been endeavouring to industrialize her country but is still confronted with severe regional problems. The northeastern part of Brazil has an excessive population, most of which are very poor. Therefore the government has made great efforts for relieving people from poverty in the northeast through local industrialization, while efficient industrialization of the whole country in the competitive industrial market, has been the essential objective for Brazil.

As has been observed, many countries have worked hard to overcome these severe regional problems in conflict with each other. Their solution is not simple. The policy makers in Japan must also look for complex means to attain both a national higher industrialization and a leveling up of low income regions, based on current actual conditions.

#### IV

The excessive concentration of industrial activities and the rapid urbanization in the three metropolitan regions have brought about new physical experiments for economic and social development and redevelopment, since these urban and suburban problems should not be neglected even for a short

time. Planned industrial estates have gradually promoted industrial decentralization from urban to suburban and other outer districts, and some flatted factories, now under plan, would be useful for small industrial firms which can not move outside the urban districts because of their proper economic function or location factors. New towns, including industrial estates, should be planned soon, although some new towns have already been constructed exclusively for residential use. Projects of urban renewal, even if very gradually, have been advanced by the construction of new shopping centers, transportation terminals or other urban facilities. Air and water pollution and other industrial nuisances which have been greatly increased by rapid industrial development, have been challenged by central and local governments, and industrial enterprises. Legal control for industrial location and industrial nuisances have been partly reinforced and partly established in response to actual circumstances, and the importance of land use planning and regional planning has been gradually recognized by the general public. The top-management of business enterprises have also emphasized their social responsibilities, including regional problems, such as location selection, industrial nuisances and community relations.

The present difficult urban problems are expected to be settled one by one by these public and private problem-conscious activities, although the experiments shown here, have not clear been found as general tendencies and most of the urban problems have not yet been attacked.

The writer believes that a flash of hope for advancing realistic regional development can be found in the case of the central industrial districts due to severe problems within itself, as stated above. Many kinds of techniques for regional development, economic, social, and physical, have been introduced through European and American experiences, especially since World War II and some of them have been adapted or newly created for our particular circumstances. The keypoint is how to integrate these techniques of regional development for cooperative activities by the many groups of public and private parties concerned. It needs, so to speak, a systematical approach to integrate these development activities. This is the most important point in Japan, since Japan has not had a long experience in regional problems as that of European and American countries, which have had many cases of trial and error experiments for landuse, control of industrial nuisances, city planning, urban renewal, and other regional development.



V

As stated above, we may expect urban problems to be settled gradually. But it seems now that effective means to diminish the regional income differences or to level up the underdeveloped regions have not yet been established sufficiently, in spite of the present regional development policy to do so.

The regional difference of the many economic activities has been analysed statistically, and the frame-work by respective regions has been established by econometric approach, even if only roughly. Local self-governments in underdeveloped regions have endeavoured to induce effective industrial plants to diminish their differences by these analysis. These industries chiefly belong to the apparatus industries; iron and steel or petrochemical industrial complexes. The expectation has been realized in a few districts, but not in most of the other districts, since the national balance of demand and supply for a certain period has naturally checked these big projects of new plant construction. These so-called foot-tight industries would be very useful for regional industrialization for longer range periods, but not always for limited periods. So we must discover more effective means for these regional problems.

Fundamentally, government financial systems and local tax systems should be revised effectively to adapt to realistic conditions, relating to the desired regional development, because many local self-governments have endeavoured to induce large-sized apparatus industries or industrial complexes in stereotyped form, disregarding their own location factors and the national balance of demand and supply and so not a few of them have failed to do so. It is reasonable to analyze once more the regional characteristics relating to industrial development, theoretically and realistically.

Now industries have been confronted with severe international competition on the one hand, and have been internally expected to promote industrial development in low income regions economically and socially on the other hand. Therefore industrial regional development should be realistically approached on the basis of the logic of industrial location.

From this view point, three types of industries are grouped for regional development, especially the decentralization of industrial activities in Japan. They are foot-tight industries, local market-center-oriented industries and foot-loose industries.

1) The foot-tight industries

The foot-tight industries depend on certain location factors and so are situated in certain local districts which have these factors, as stated before. They are some of the most leading industries for industrialization in the local

districts. But they have two problems.

One problem is that of limitation by the national balance of demand and supply. It has been shown before. The second point is that apparatus industries are basic or preliminary process industries and not assembly industries. Apparatus industries are not accompanied by so many plants of other related industries as assembly or later process industries. Because of this the finished product industries, consumer and producer goods, should promote and induce more related industries than the preliminary process industries in the present market mechanism. In other words, backward integration of industries are found more in the competitive market than in forward integration. For this reason, a few new industrial districts have succeeded in industrialization by the type of foot-tight industries, but have few multiplier effects through related industries.

2) The local market-center oriented industries.

This type of industries has not yet been well recognized for their use in local industrialization in Japan generally. But a realistic analysis has shown their effectiveness. The increasing buying power has promoted this tendencies, year to year and the local markets have gradually grown larger. More industries have been changed to mass production types, and their markets been made more competitive by a few manufacturers. They have had to pay attention and serve their local market customers. A considerable number of these industrial plants, which are middle-sized, and belong to relatively large-sized firms, have been established in central cities in local districts during these last ten years. They have contributed to industrialization in local districts, though their contribution to local districts have not been so large as to diminish the regional income difference by specific figures. This is one method of frontal attack to regional development for the time being. But this method has been inclined to be overlooked now by the policy makers.

3) The foot-loose industries.

Foot-loose industries originally could be decentralized to relatively wider fields, due to their locational flexibility. But the foot-loose industries in Japan have concentrated characteristically in the three central industrial districts as stated before. Is this unavoidable by the logic of industrial location? We find the decentralization of this type of industries in European and American countries. We will give a few more details of actual regional industrialization in Japan.

We can find three points of possibilities of industrial movement or decentralization in the foot-loose industries. The first key is found in the fact that

new industrial development has been realized more in the environmental parts than in the central parts of the industrial districts. The second key is that the business policies of exceptionally located industries, have been found in local districts, distant from the central districts. The third key is found in the originally "foot-loose" factor. In other words, it is expected that business features of the foot-loose industries in Japan can be changed by their business policies for decentralization. The foot-loose industries will be analysed more in detail as follows.

## VI

The representative parts of the foot-loose industries are mechanical engineering, electric machinery, electronics, and precision industries from the standpoint of the present regional development problems. In Japan, these industries have been concentrated in the three metropolitan regions and seem to depend on the agglomeration of related industries and with each other. Therefore they tend to decentralize gradually, only through regional expansion because of the result of land use competition in the central parts. Naturally it is very difficult for these regional expansions to maintain reasonable land-use in the suburban and surrounding districts, though natural expansion contributes to regional industrial development more or less. Comprehensive regional planning, economic, social, and physical, is indispensable in these suburban and surrounding districts. In these cases, planned industrial estates or industrial parks are very useful for the desired industrial development. These planned estates, so to speak, are multi-purpose devices for economic, social, and physical development in certain districts. But desired land-use in the suburban and surrounding districts can not always be attained through this type of estates only. Comprehensive planning should be indispensable for economic and social development. The development of these types of industrial estates tend to bring about new town planning or community planning, as we can find in the experiences in Britain and the U.S.A. Actually, aside from the problem of regional industrialization we are also confronted with disorganized land-use due to housing problems, especially the increasing number of inferior-quality houses, in the suburban and outlying parts of the central regions.

In short, an industrial development policy in surrounding districts for relieving the excessive concentration in the central districts should not bring out similar disorganized land-use in surrounding districts as in the central districts.

The most difficult problem is the industrial development of local low-income districts, relatively remote from the central districts. It is unreasonable that these problems should depend exclusively on industrial development. But industrial development should also be sought for as much as possible since it will bring about strong community-feeling. How to develop industries and which field is more suitable are also important points.

We can find a considerable number of newly growing industrial firms in local districts, which have developed from private or family-owned business types to larger industrial enterprise types, developing new business fields based on industrial innovation. These types of industrial firms have developed entirely in the local market in the preliminary stage and then have enlarged their market beyond their locality. The policy makers of regional development should find these growing firms and take good care of the nucleus energy in their local community. Though this energy can not be uncovered by a rough statistical approach, this energy is very important in the dynamic approach to regional development problems.

Are there any other effective ways for local industrialization? Some method could, even-if very difficult, be found with the condition of cooperation between the central and local governments and industrial firms. Actually a small number of middle-sized plants in some kinds of foot-loose industries have developed in some local districts, remote from the central districts. These industrial firms have started their own peculiar business policies, overcoming the defects of their location factors which are situated at a long distance from the central districts. Public assistance will promote the development of this type of industries. Of course the deeper concerns of business management are indispensable from the standpoint of a wider range social responsibility. These creative business policies are related to business and industrial innovations. The foot-loose industries in Japan bound tight in the central districts, will be able to disperse to wider districts by a more creative management.

## VII

The leveling up of underdeveloped districts is the remaining and less answerable problem, while the excessive concentration problem in the three central metropolitan regions can be expected to be solved gradually, as stated here. The leveling-up problem can be approached more or less by some means of industrial development. But the problem should be more fundamentally and realistically grasped by the policy makers. The target of regional difference in per-head income and other economic activities is theoretical and

comprehensive, but is not enough to actuate effective development activities.

Actually there are some cases in which people in underdeveloped districts do not always feel the inconvenience realistically inspite of their considerable low income as can be grasped statistically. And yet the low standard of their living is a realistic problem. Now in Japan, we should reexamine the actual conditions and try to find more effective means of solving the problems through realistic and theoretical analysis. This is the present stage of regional industrial development in Japan.

## THE DEVELOPMENT OF JAPANESE TRADE WITH THE BRITISH COMMONWEALTH IN ASIA

Fukuo KAWATA

### I

By the British Commonwealth in Asia we designate the six countries, of Hong Kong, Malaysia, Singapore, India, Pakistan and Ceylon. In this article we shall deal with the recent development of Japanese trade with these countries. We have limited our study to the period between 1958 and 1965.

At first we shall examine the ratio of Japanese export to this area to her total export. The ratio which was 12% in 1934-36, went up to 20% in 1950, but came down to 10% in 1965. The highest record of 25% was registered in 1952, the year immediately following the Korean War. After that year the ratio tended to decline owing partly to the import restriction against Japanese commodities in the sterling area and partly to the slowdown of the Korean War Room, declining to only 10% in 1959. Later the ratio recovered a little, and has remained at the level of 11 or 12% since 1960. The amount of export to this area which was only 165 million dollars in 1950, suddenly jumped to 316 million dollars in 1952, but in 1953 it fell down to 158 million dollars, half the amount of the previous year. The amount gradually recovered, reaching the level of 300 million dollars in 1955, of 400 million dollars in 1960, of 500 million dollars in 1962, of 600 million dollars in 1963, of 700 million dollars in 1964 and of 800 million dollars in 1965. (See table 1)

Table 1. Japanese Export to the British Commonwealth in Asia

	Total Export	Export to the British Commonwealth in Asia	Ratio of B to A $\left(\frac{B}{A}\right)$ (%)
	(A)	(B)	
1934-36	928	110	12
1950	820	165	20
1951	1,255	216	17
1952	1,273	316	25
1953	1,275	158	12
1954	1,629	243	15
1955	2,010	311	16

1956	2,501	361	14
1957	2,858	369	13
1958	2,877	333	12
1959	3,457	352	10
1960	4,055	477	12
1961	4,235	485	12
1962	4,916	549	11
1963	5,452	638	12
1964	6,673	766	12
1965	8,452	816	10

(Source) Ministry of International Trade and Industry, *Nippon Boeki no Tenkai* (The Development of Japan's Foreign Trade) 1956, and "Tsusho-Hakusho" (White Paper on the International Trade of Japan).

(Note) In the figures of 1936-38, trade with Burma is included.

Next, we shall consider the movement of Japanese import from this area in relation to her total import.

In prewar years (1934-36 average), Japanese import from this area consisted of 12% of her total import and in the 1950's (except in 1954) it recorded 10% or 12%, but in the 1960's the ratio began to decline, and came down to as low as 6% in 1964 and 1965. The amount of import from this area which was 100 million dollars in 1950, more than doubled in 1951, and kept increasing in the following two years. In 1954, the amount of import decreased owing to the tight money policy of Japan, but in the following years, the amount increased steadily until it was brought down to 300 million dollars again by 1958, when the retrenchment policy was again put into practice. After that year, import regained its upward movement until 1962, when it decreased to 433 million dollars by the restrictive credit policy for the third time. In 1963, the import figure reached the level of 500 million dollars, and maintained this amount in 1965, although it dipped to 474 million dollars in 1964. (See Table 2). It is noteworthy that the ratio of import from this area has been declining year by year, although that of export to this area has kept almost the same level, at least since 1958.

The balance of trade of Japan with this area was positive in 1950 and 1952, but it was negative in 1951 and 1953. Especially, in 1953, the excess of import over export reached as high as 120 million dollars. This was due to her rising import demand in spite of the shrinking export owing to the severe import restrictions carried out in the sterling area. On the contrary, in 1954, the balance turned positive with the decrease of import. The favorable balance of trade continued until 1965 with the exception of 1957 and 1959.

Table 2. Japanese Import from the British Commonwealth in Asia

(unit: million of U. S. dollars)

Years	Total Import	Import from the British Commonwealth in Asia	The Ratio of B to A $\left(\frac{B}{A}\right)(\%)$
1934-36	951	119	12
1950	974	100	10
1951	1,995	234	12
1952	2,028	243	12
1953	2,410	278	12
1954	2,399	178	7
1955	2,471	264	11
1956	3,230	346	11
1957	4,284	418	10
1958	3,033	300	10
1959	3,600	395	11
1960	4,491	451	10
1961	5,810	472	8
1962	5,637	433	8
1963	6,736	504	8
1964	7,938	474	6
1965	8,169	506	6

(Source) Same as Table 1

(Note) Same as Table 1

It is a quite noticeable fact that since 1962 the amount of favourable balance suddenly increased and kept on increasing year after year; 116 million dollars in 1962, 134 million dollars in 1963, 292 million dollars in 1964, and 310 million dollars in 1965, totalling 852 million dollars in these four years. As the excess of export to this area during the 16-year period of 1950-1965 totalled to 942 million dollars, this amount of 852 million dollars took up 90% of the total. (See table 3). The ratio of trade balance to export has been growing larger since 1962, reflecting the increasing export surplus to this area.

Table 3. Japanese Balance of trade with the British Commonwealth in Asia

	Export (A)	Import (B)	Balance (C) = (A) - (B)	$\frac{(C)}{(A)} \%$
1934-36	110	119	- 19	-10.8
1950	165	100	65	39.4
1951	216	234	- 18	- 8.3
1952	316	243	73	23.2
1953	158	278	-120	-76.0
1954	243	178	65	26.8



1955	311	264	47	15.2
1956	361	346	15	4.1
1957	369	418	- 49	-13.6
1958	333	300	13	3.9
1959	353	395	- 42	-11.9
1960	478	451	27	5.6
1961	486	472	14	2.8
1962	549	433	116	20.2
1963	638	504	134	21.0
1964	766	474	292	38.1
1965	816	506	310	38.0

(Source) Same as Table 1

(Note) Same as Table 1

## II

Formerly, Japanese exports to this area chiefly consisted of light industrial goods, such as cotton manufactures but in recent years, the composition of commodities has changed remarkably. The share of light industrial products decreased, while that of machinery increased. This signifies the changing pattern of demand in this area due to the progress of industrialization.

Table 4 shows how the commodity composition of Japanese exports to this area changed during the period in question.

Table 4. Commodity Composition of Japanese Exports to the British Commonwealth in Asia (%)

SITC Code		1958	1963	1965
0.	Foodstuff	5	6	3
1.	Beverage and Tobacco	—	—	—
2.	Raw materials excluding fuels	1	2	2
3.	Mineral fuels	—	—	—
4.	Oil and Fat	1	—	—
5.	Chemicals	5	8	8
6.	Manufactured goods classified chiefly by materials	68	48	45
7.	Machinery	14	31	35
8.	Miscellaneous manufactured articles	6	7	6
9.	Others	—	—	1
Total		100	100	100
Value in million of U.S. dollars		(333)	(638)	(816)

(Sources) Same as Table 1, and Nippon Boeki Geppyo (Japan Exports and Imports), Dec. 1965.

The commodity pattern of Japanese import from this area is characterized by the predominant position of raw materials amounting to 80% of the total import. Recent changes in the pattern are noticed in the increase of the share of manufactured goods classified chiefly by materials and in the decrease in the share of raw materials and mineral fuels.

The increase in the percentage of manufactured goods implies the advance of industrialization in this area.

Table 5. Commodity Composition of Japanese Imports  
from the British Commonwealth in Asia

SITC Code		1958	1963	1965 (%)
0.	Foodstuff	1	6	4
1.	Beverage and Tobacco	—	—	—
2.	Raw materials excluding fuels	81	80	76
3.	Mineral fuels	12	4	5
4.	Oil and Fat	—	—	—
5.	Chemicals	1	1	1
6.	Manufactured goods classified chiefly by materials	5	9	13
7.	Machinery	—	—	—
8.	Miscellaneous manufactured articles	—	—	1
9.	Others	—	—	—
Total		100	100	100
(Value in million of U. S. dollars)		(300)	(504)	(506)

(Sources) Same as Table 4.

Now let us examine the recent development of Japanese trade with individual countries in this area.

### 1. Hong Kong

Japanese trade with Hong Kong has always registered an export surplus. Moreover, the surplus is so large that the ratio of trade balance to export is the largest in this area, registering 87.5% between 1958 and 1965.

The principal export commodities to Hong Kong are textiles, machinery, and metals. These three kinds of articles take up about two thirds of the total.

Of textiles, cotton fabrics are the largest in value, but woollen yarns and synthetic fibre fabrics have made a remarkable expansion in recent years.

For example the value for woollen yarns has increased twelve times and for synthetic fibre fabrics forty times between 1958 and 1965.

Of machinery exported to Hong Kong, electrical machines have accounted

for about 60% of all machinery in recent years.

Of metals, iron and steel, and of chemicals, artificial plastics are most important. As to imports from Hong Kong, foodstuff, such as fish, and metal scrap, such as iron and non-ferrous metal scrap are important, but recently precious and semi-precious stones have made a marked increase.

Table 6. Japanese Trade with Hong Kong

	(in million of U. S. dollars)			
	Export (A)	Import (B)	Balance (C)	$\left(\frac{C}{A}\right)\%$
1958	100	12	88	88.0
1959	129	27	102	79.2
1960	156	23	133	85.2
1961	154	24	130	84.4
1962	192	19	173	90.0
1963	246	29	217	88.2
1964	292	29	263	90.0
1965	288	35	253	87.7
1958~1965	1,558	198	1,360	87.5

(Sources) Ministry of International Trade and Industry, "Tsusho Hakusho"  
(White Paper on the International Trade of Japan)

(Note) Figures do not add up due to rounding.

Table 7. Japanese Export Commodities to Hong Kong

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	100	129	156	154	192	246	292	288
Textiles	48	57	67	58	77	89	104	100
(cotton fabrics)	(24)	(29)	(28)	(24)	(29)	(26)	(28)	(26)
(woolen yarns)	(1)	(2)	(3)	(3)	(8)	(12)	(16)	(17)
(synthetic fibre fabrics)	(0.4)	(0.4)	(1)	(—)	(7)	(14)	(15)	(14)
Machinery	11	17	29	26	29	48	58	53
(general)	(3)	(8)	(14)	(1)	(8)	(10)	(18)	(16)
(electric)	(3)	(7)	(10)	(13)	(17)	(25)	(32)	(31)
(transportation)	(4)	(0.4)	(2)	(4)	(4)	(14)	(10)	(9)
(precision)	(1)	(2)	(3)	(3)	(4)	(5)	(7)	(10)
Metals	8	7	10	11	22	32	39	43
(iron & steel)	(5)	(3)	(6)	(7)	(16)	(34)	(28)	(28)
Chemicals	5	6	7	11	15	21	24	25
(artificial plastics)	(2)	(3)	(3)	(4)	(8)	(12)	(14)	(15)

(Sources) Same as Table 6.

Table 8. Japanese Import Commodities from Hong Kong

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	12	27	23	24	19	29	29	35
Foodstuff	0.1	0.2	0.4	1	1	6	4	7
(fish)	(-)	(-)	(-)	(0.6)	(0.9)	(5)	(4)	(6)
Raw Materials	11	25	21	19	7	13	13	12
(scrap iron)	(4)	(11)	(13)	(12)	(4)	(5)	(5)	(4)
(non-ferrous metal scrap)	(3)	(9)	(4)	(4)	(3)	(4)	(4)	(3)

(Sources) Same as Table 6.

## 2. Malaysia

Japanese trade with Malaysia recorded negative balances throughout the whole period. Moreover the amount of import from Malaysia was far greater than that of export to this country, so much so that the import surplus was extremely large. This is one of the features of Japanese trade with Malaysia. The ratio of trade balance to export has, however, been decreasing in terms of absolute number during this period owing to the increase of export.

(See Table 9).

Table 9. Japanese Trade with Malaysia

	(in million of U. S. dollar)			
	Export (A)	Import (B)	Balance (C)	$\frac{(C)}{(A)}$ (%)
1958	14	159	-145	-1035.0
1959	21	223	-202	-966.0
1960	34	271	-237	-700.0
1961	35	298	-265	-752.0
1962	44	281	-237	-540.0
1963	56	270	-214	-382.0
1964	59	256	-197	-334.0
1965	75	263	-188	-250.0
1958-65	338	2,021	-1,683	-496.0

(Sources) Same as Table 6.

(Note) Same as Table 6.

The principal exports to Malaysia are machinery and metals. These two items accounted for more than sixty per cent in 1965.

Next come foodstuff, textiles and chemicals, but their amounts are not so large. (See Table 10).

Table 10. Export Commodities to Malaysia

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	14	21	34	35	44	56	59	75
1. Machinery	2	5	9	9	12	19	24	27
(general)	(0.8)	(1)	(2)	(3)	(4)	(9)	(7)	(9)
(electric)	(0.5)	(1)	(2)	(2)	(3)	(5)	(7)	(8)
(transportation)	(0.4)	(2)	(5)	(4)	(5)	(6)	(9)	(11)
(precision)	(0.2)	(0.3)	(0.5)	(0.4)	(0.3)	(0.5)	(0.5)	(0.5)
2. Metals	3.3	5	9	7	12	14	15	21
(iron and steel)	(2.6)	(3.4)	(7.5)	(5.4)	(10.3)	(11.6)	(13.3)	(16.3)
4. Foodstuff	1.5	2.1	2.7	3.6	3.6	4.5	4.5	7.6
(wheat flour)						(1.6)	(1.5)	(4.1)
(fish)	(0.5)	(0.8)	(0.9)	(1.3)	(1.0)	(1.7)	(2.3)	(2.7)
5. Textile	3.7	3.8	5.3	5.8	4.8	5.7	6.0	6.9
(cotton fabrics)	(0.9)	(0.7)	(1.2)	(1.9)	(2.0)	(1.9)	(2.1)	(2.4)
6. Chemicals	0.5	1.3	1.5	2.1	2.7	3.6	3.0	4.2
(artificial plastics)	(0.1)	(0.2)	(0.4)	(0.4)	(0.6)	(0.9)	(1.0)	(1.7)

(Sources) Same as Table 6.

Japan's main imports from Malaysia consist of raw materials (such as iron ore, timber, and natural rubber,) and metals (such as tin).

Iron ore, natural rubber, and tin are imported from the former Federation of Malaya, while timber comes from the former British Borneo. In 1965, timber and iron ore were the two largest commodities, both amounting to more than eighty million dollars. Natural rubber which was the largest item in 1958 and in 1959, declined to 18 million dollars in 1965. The amount of tin import made a considerable increase from 12 million dollars in 1958 to 52 million dollars in 1965. (See table 11).

Table 11. Import Commodities from Malaysia

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	159.3	223.4	271.1	297.6	280.6	270.0	256.1	262.5
Raw materials	119.7	184.9	222.0	242.3	241.1	229.2	201.9	204.6
(iron ore)	(30.9)	(50.3)	(72.2)	(89.5)	(84.8)	(82.0)	(80.4)	(81.8)
(timber)	(9.9)	(21.2)	(28.2)	(47.0)	(55.5)	(64.3)	(66.5)	(86.0)
(raw rubber)	(54.1)	(71.5)	(69.8)	(57.6)	(50.9)	(53.4)	(30.8)	(18.0)
(latex)	(7.7)	(13.1)	(14.3)	(12.2)	(11.6)	(9.4)	(7.9)	(6.4)
Metals								
(tin)	(12.2)	(17.4)	(23.5)	(25.4)	(7.7)	(32.6)	(48.6)	(52.1)

(Sources) Same as Table 6.

### 3. Singapore

In contrast to Malaysia, Singapore is, like Hong Kong, an export surplus market for Japan. Japanese export to this country is always larger than her import. The ratio of trade balance to export was about 74% in 1965, although it was 84% in 1958 and 88% in 1959.

The average ratio during the period 1958-1965 was 78.4%. This is second only to that of Hong Kong.

Table 12. Japanese Trade with Singapore

	(in million of U. S. dollars)			
	Export (A)	Import (B)	Balance (C) = (A)-(B)	(C) (A) %
1958	77	13	64	83.6
1959	75	9	66	88.0
1960	87	13	74	84.5
1961	102	25	77	75.8
1962	105	23	82	78.4
1963	112	22	90	80.0
1964	114	27	87	76.6
1965	124	33	91	73.6
1958-65	796	169	627	78.4

(Sources) Same as Table 6.

(Note) Same as Table 6.

Principal exports to Singapore are textiles, metals, and machinery.

Of textiles, cotton fabrics were the leading articles in 1958, but in 1964 and in 1965, synthetic fibre goods ranked first, outstripping cotton fabrics.

Metals came next, machinery ranking third. The main categories of machinery were electric and general. (See table 13).

Table 13. Export Commodities to Singapore

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	77.2	75.3	87.0	101.8	105.0	112.0	114.2	124.0
1. Textiles	44.3	35.4	35.9	47.6	41.4	40.8	34.0	34.8
(cotton fabrics)	(12.7)	(11.7)	(16.1)	(19.3)	(15.4)	(14.0)	(8.8)	(7.2)
(synthetic fibre textiles)	(0.3)	(0.6)	(1.3)	(-)	(6.7)	(9.4)	(10.1)	(12.9)
2. Metals	8.4	9.1	13.0	12.8	16.8	19.1	20.8	28.1
(iron and steel)	(6.4)	(7.0)	(10.1)	(9.0)	(12.9)	(15.1)	(16.5)	(21.6)
3. Machinery	5.8	7.6	10.8	12.0	16.0	19.1	30.6	26.7
(general)	(2.1)	(2.0)	(2.4)	(4.4)	(3.4)	(4.0)	(8.1)	(8.4)
(electric)	(1.5)	(2.6)	(3.2)	(4.8)	(7.8)	(11.4)	(18.9)	(15.2)
(transportation)	(1.1)	(1.8)	(3.4)	(3.0)	(4.8)	(4.3)	(4.5)	(4.4)
(precision)	(1.1)	(1.3)	(1.9)	(2.4)	(2.5)	(3.2)	(2.9)	(3.6)

4. Chemicals	1.8	2.0	2.2	3.2	4.6	5.0	4.8	6.3
(artificial plastics)	(1.1)	(0.8)	(1.0)	(1.0)	(1.8)	(2.2)	(2.1)	(3.1)

(Sources) Same as Table 6.

Japanese imports from Singapore are chiefly mineral fuels, such as heavy oil, and raw materials, such as natural rubber and non-ferrous metal scrap. These two items cover more than 90 per cent of the total amount of imports. (See table 14).

Table 14. Imports from Singapore

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	12.7	9.0	13.5	24.6	22.7	22.4	26.7	32.7
Mineral fuels (heavy oil)	6.9 (5.0)	4.0 (2.2)	9.5 (7.5)	19.8 (16.9)	19.1 (13.8)	16.6 (11.6)	12.5 (9.6)	20.7 (18.9)
Raw materials (natural rubber)	3.2 (0.2)	3.4 (0.2)	3.0 —	3.9 —	2.6 (0.3)	4.7 (0.3)	12.3 (6.6)	9.9 (5.0)
(non-ferrous) metal scrap)	(0.5)	(0.5)	(0.7)	(0.6)	(0.7)	(1.5)	(1.7)	(1.4)

(Sources) Same as Table 6.

#### 4. India

Japanese trade with India during this period registered an export surplus except in 1959. The ratio of trade balance to export tended to increase between 1959 and 1965. This signifies the growing Japanese export to this country relative to her increase of import. (See table 15)

The ratio of balance to export during the period in question is the smallest in this area, showing 15.4%. This means that the trade of Japan with India is the best-balanced in this area. (See table 15)

Table 15. Japanese Trade with India

	(in million of U. S. dollars)			
	Export (A)	Import (B)	Balance (C) = (A) - (B)	$\frac{(C)}{(A)}$ (%)
1958	85	74	11	12.0
1959	76	92	-16	-21.2
1960	109	100	9	8.5
1961	111	111	0.2	0.2
1962	119	93	26	24.2
1963	154	126	28	18.0
1964	189	142	47	25.0
1965	203	139	64	32.0
1958-65	1,036	877	159	15.4

(Sources) Same as Table 6.

(Note) Same as Table 6.

More than half the amount of exports to India has been occupied by machinery since 1962. Of machinery exported to this country, general machinery ranked first, followed by transportation and electric machinery.

Next to machinery came metals and chemicals. Although textiles were the chief exports to India in former days, they are now quite unimportant. (See table 16)

Table 16. Export Commodities to India

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	84.8	75.9	108.7	111.1	119.4	153.7	189.3	203.4
Machinery	24.0	23.0	32.6	44.1	66.8	85.7	98.7	116.8
(general)	(7.6)	(10.3)	(14.2)	(22.3)	(29.0)	(21.7)	(37.3)	(48.3)
(electrical)	(6.0)	(4.3)	(8.0)	(9.2)	(17.1)	(22.9)	(24.2)	(30.0)
(transportation)	(10.0)	(7.8)	(9.2)	(12.4)	(20.6)	(41.3)	(37.3)	(38.5)
Metals	41.3	19.1	55.0	41.1	27.1	31.6	55.1	49.0
(iron and steel)	(39.5)	(16.8)	(51.5)	(38.3)	(24.9)	(28.9)	(50.8)	(38.3)
Chemicals	8.4	20.6	7.0	11.1	10.7	19.1	19.3	23.6
(chemical fertilizer)	(5.8)	(16.0)	(1.1)	(5.8)	(4.7)	(13.5)	(11.6)	(14.1)
Textiles	6.2	7.8	6.0	8.1	8.3	10.3	7.8	6.2
(synthetic fibre yarns)	(1.6)	(1.2)	(0.8)	(1.3)	(1.9)	(2.5)	(3.9)	(3.6)

(Source) Same as Table 6.

Main import commodities from India are raw materials, such as iron ore, raw cotton, scrap iron and manganese ore.

Among these, iron ore is the most important item, accounting for about a half of the amount of raw materials imported from India. (See Table 17)

Table 17. Import Commodities from India

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	73.4	92.3	99.5	110.9	93.1	125.6	142.0	139.0
Raw materials	70.1	86.0	91.4	99.2	85.0	98.9	112.8	126.2
Iron ore	30.0	30.9	40.5	30.4	37.4	45.6	53.8	60.2
Raw cotton	19.7	21.2	12.9	31.2	23.8	24.7	20.6	21.5
Scrap iron	3.3	11.3	15.3	18.5	6.5	10.8	12.7	17.4
Manganese ore	3.4	4.8	4.0	6.8	4.4	5.3	9.9	11.1

(Sources) Same as Table 6.

## 5. Pakistan

Japanese trade with Pakistan between 1960 showed an export surplus, although in 1958 and 1959, an import surplus was experienced.

The ratio of trade balance to export tended to increase (except in 1963).



This means the expansion of export in relation to import from this country.  
(See Table 18)

Table 18. Japanese trade with Pakistan

	(in million of U. S. dollars)			
	Export (A)	Import (B)	Balance (C) = (A) - (B)	$\frac{(C)}{(A)}$ (%)
1958	22	34	-12	-55.8
1959	25	32	-7	-29.0
1960	59	32	17	46.4
1961	52	29	23	44.0
1962	57	29	29	50.3
1963	47.8	47.7	0.1	0.2
1964	81	31	49	61.4
1965	104	27	77	74.4
1958-1965	447	261	186	41.5

(Sources) Same as Table 6.

(Note) Same as Table 6.

More than a half of Japanese exports to Pakistan is taken up by machinery, of which general machines including textile machines are most important. Between 1958 and 1965, the amount of machinery exported increased about ninefold.

Next to machinery came metals, while textiles ranked third. (See table 19)

Table 19. Export Commodities to Pakistan

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	22.0	25.1	59.0	51.7	57.3	47.8	80.5	103.9
1. Machinery	5.8	10.9	31.2	14.7	30.9	18.7	35.3	54.3
(general)	(4.6)	(7.5)	(18.7)	(10.1)	(25.8)	(10.9)	(22.3)	(33.0)
(electric)	(0.8)	(0.8)	(4.2)	(2.3)	(3.6)	(5.1)	(6.6)	(15.1)
(transportation)	(0.2)	(2.3)	(7.7)*	(2.3)	(1.5)	(2.8)	(6.5)	(6.3)
(precision)	(0.1)	(0.3)	(0.6)	(0.5)	(0.6)	(0.8)	(0.9)	(1.2)
2. Metals	8.8	5.6	12.3	17.3	5.5	8.3	14.9	21.4
(iron and steel)	(7.6)	(4.0)	(9.6)	(14.2)	(2.6)	(5.2)	(8.3)	(12.2)
3. Textiles	3.5	4.0	6.9	6.1	7.2	6.8	11.3	11.5
(viscose short fibre)				(0.2)	(0.9)	(2.1)	(1.9)	(2.4)
(artificial silk yarn)	(1.1)	(1.6)	(2.1)	(1.7)	(3.2)	(1.9)	(3.2)	(2.3)

(Sources) Same as Table 6.

(Note) \* Ships of 4.0 million dollars are included.

Imports from Pakistan are chiefly raw materials, such as cotton and jute.  
(See Table 20)

Table 20. Import Commodities from Pakistan

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	34.2	32.4	31.7	28.9	28.5	47.7	31.1	26.5
Raw materials	34.1	32.1	30.8	27.9	27.6	46.0	28.1	24.0
(cotton)	(25.3)	(21.4)	(17.2)	(12.3)	(16.0)	(31.4)	(15.7)	(12.8)
(jute)	(7.1)	(7.2)	(10.0)	(11.9)	(8.8)	(12.6)	(9.6)	(8.1)

(Source) Same as Table 6.

## 6. Ceylon

Japanese trade with Ceylon showed an export surplus during this period. The ratio of trade balance to export ranged from 55% in 1958 to 70% in 1965, but the average ratio during the period was 66.2%. This figure places her third in this area following India and Pakistan.

Table 21. Japanese Trade with Ceylon

	(in million of U. S. dollars)			
	Export (A)	Import (B)	Balance (C) = (A) - (B)	$\frac{(C)}{(A)}$ (%)
1958	34	7	27	78.8
1959	26	10	16	60.4
1960	32	12	20	61.6
1961	33	10	23	65.0
1962	32	7	25	77.5
1963	22	10	12	56.4
1964	23	10	13	58.8
1965	22	10	12	54.5
1958-65	226	77	149	66.2

(Source) Same as Table 6.

(Note) Same as Table 6.

About half the exports to Ceylon was occupied by textiles in 1965. Next came metals and machinery, although their amounts were very small.

(See Table 22)

Table 22. Export to Ceylon

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	34.6	26.0	32.2	33.0	32.4	22.0	23.3	22.0
1. Textiles	25.0	15.8	17.8	18.7	15.2	8.1	9.9	9.2
(cotton fibres)	(13.5)	(7.8)	(9.1)	(13.0)	(10.5)	(5.5)	(6.3)	(5.0)

2. Metals	1.1	0.8	2.2	2.3	3.6	3.2	2.4	2.4
(iron and steel)	(0.4)	(0.3)	(1.1)	(1.4)	(2.8)	(2.7)	(1.9)	(1.9)
3. Machinery	1.1	2.4	3.2	2.3	2.8	3.0	3.2	2.3
(general)	(0.3)	(0.6)	(0.8)	(0.3)	(0.9)	(1.9)	(1.8)	(1.1)
(electric)	(0.3)	(0.4)	(0.8)	(0.8)	(1.3)	(0.4)	(0.6)	(0.7)
(transportation)	(0.2)	(1.0)	(1.3)	(0.9)	(0.6)	(0.7)	(0.7)	(0.5)
(precision)	(0.3)	(0.3)	(0.2)	(0.4)	(0.2)	(0.1)	(0.1)	(0.1)
4. Chemicals	0.2	0.4	0.7	0.6	1.8	1.5	1.9	1.9
(fertilizer)					(0.4)	(0.7)	(1.0)	(1.2)

(Sources) Same as Table 6.

Imports from Ceylon mainly consist of raw materials, such as natural rubber and coir, and foodstuff, such as black tea. Both categories take up almost all the amount of import. (See Table 23)

Table 23. Import from Ceylon

	(in million of U. S. dollars)							
	1958	1959	1960	1961	1962	1963	1964	1965
Total	7.3	10.3	12.4	10.2	7.3	9.6	9.6	10.1
Raw materials	5.2	8.1	10.0	6.7	4.5	5.8	6.0	5.6
(natural rubber)	(3.7)	(5.7)	(7.2)	(3.2)	(2.5)	(2.5)	(1.8)	(2.4)
(coir)	(1.2)	(1.3)	(2.0)	(2.2)	(1.4)	(2.7)	(2.9)	(2.1)
Food-stuff	2.0	2.2	2.4	3.0	2.5	3.5	3.3	4.3
(black tea)	(1.4)	(1.6)	(1.9)	(2.5)	(2.2)	(2.9)	(2.8)	(3.9)

(Sources) Same as Table 6.

From the above statistical figures, we can classify the Asian British Commonwealth into two groups as to our export commodities. One is the light industrial goods market and the other is the heavy industrial goods market. To the former belong Hong Kong, Singapore and Ceylon, where textiles are leading articles among exports, while to the later belong India, Pakistan and Malaysia, where machinery, or metals hold a predominant position among exports.

As to the ratio of trade balance to export during this period, the largest figure is registered by Hong Kong (87.5%), followed by Singapore (78.4%), Ceylon (66.2%), Pakistan (41.5%) and India (15.4%). Malaysia recorded a ratio of -496%, meaning an extremely large import surplus. The smaller the ratio in absolute number, the better balanced is Japanese trade with that country, showing that her trade with India is best balanced.

### III

As to the geographical composition of Japanese trade with the Asian British Commonwealth, we find that, as to market, Hong Kong ranks first

taking up more than one third of Japan's export to this area, followed by India and Singapore, accounting for 25% and 15% respectively in 1965.

As to Japan's sources of supply, Malaysia plays the most important role, occupying 52% of her import from this region in 1965. India ranks next to Malaysia, showing 28% in 1965. The above two countries accounted for 80% of Japan's import from this area ; similar conditions prevailed in 1958. (See Table 24)

Table 24. Geographical Composition of Japanese Export to the Asian British Commonwealth (%)

	1958	1963	1965
1. Hong Kong	30	39	35
2. India	25	24	25
3. Singapore	23	18	15
4. Pakistan	7	8	13
5. Malaysia	4	8	9
6. Ceylon	10	3	3
Total	100	100	100
(Value in million of U.S. dollars)	(333)	(638)	(816)

(Sources) Same as Table 6.

From the above table, we realize that between 1958 and 1965, Hong Kong, Pakistan and Malaysia increased their shares in the exports from Japan, while Singapore and Ceylon decreased theirs.

Table 25. Geographical Composition of Japanese Import from the Asian British Commonwealth

	1958	1963	1965
1. Malaysia	53	54	52
2. India	25	25	28
3. Hong Kong	4	6	7
4. Singapore	4	4	6
5. Pakistan	11	9	5
6. Ceylon	3	2	2
Total	100	100	100
(Value in million of U.S. dollars)	(300)	(504)	(506)

(Sources) Same as Table 6.

From the above table, it is made clear that during the period in question, India, Hong Kong and Singapore raised their shares in the imports into Japan, while Pakistan and Ceylon lowered theirs.

When we compare the composition of British export to this region with

that of Japan, we find that the largest market for Britain is India, while Hong Kong is the largest outlet for Japanese goods, India following Hong Kong. (See Table 26)

Table 26. Geographical Composition of British Export to Commonwealth Countries in Ashia (%)

	1958	1963	1965
1. India	50	40	34
2. Malaysia	12	14	} 27
3. Singapore	11	11	
4. Hong Kong	10	16	19
5. Pakistan	9	12	15
6. Ceylon	8	7	5
Total	100	100	100
(Value in million of U.S. dollars)	909	953	971
(Ratio of export to the Asian Commonwealth countries to the total export of Britain)	10%	8%	7%

(Sources) IMF. Direction of Trade.

From the above Table, we find that during the period in question the shares of India and Ceylon were decreasing, while those of Hong Kong and Pakistan increased. Although India still remains the largest market for Britain, it is a noticeable fact that its share has steadily been declining.

Table 27. Geographical Composition of British Import from the Asian Commonwealth Countries (%)

	1958	1963	1965
1. India	46	43	41
2. Hong Kong	9	21	22
3. Malaysia	15	9	} 15
4. Singapore	7	5	
5. Ceylon	15	13	14
6. Pakistan	7	8	8
Total	100	100	100
(Value in million of U.S. dollars)	848	915	889
(Ratio of import from the Asian Commonwealth countries to the total import of Britain)	8%	7%	5%

(Sources) Same as Table 26.

From the above table, it can be noted that as in the case of export the share of India tends to decrease, while that of Hong Kong increases. It is a noticeable fact that the relative importance of the Asian Commonwealth Countries as British export markets and as British sources of import is

decreasing, as is seen in the case of Japan.

It is a matter of common knowledge that the commonwealth countries are protected from foreign competition by the Imperial Preference system.

It is needless to say that the British position in the commonwealth was traditionally more important than that of Japan, but in recent years the Japanese position has been improving slightly.

Between 1958 and 1963, the Japanese share in the total export of the commonwealth countries in Asia rose from 6% to 8%, while the British share declined from 19% to 17%.

During this same period, the Japanese share in the total import of this region increased from 7% to 9%, while that of Britain decreased from 17% to 15%. (See Tables 28 and 29)

Table 28. Position of Britain and Japan in the Export of the Asian Commonwealth Countries (%)

		Export to Japan	Export to Britain
Hong Kong	{ 1958	4	11
	{ 1965	6	14
Malaysia	{ 1958	12	15
	{ 1965*	17	7
Singapore	{ 1958	8	10
	{ 1965	4	6
India	{ 1958	6	28
	{ 1965	7	19
Pakistan	{ 1958	10	20
	{ 1963	5	13
Ceylon	{ 1958	2	34
	{ 1965	2	26
Total	{ 1958	6	19
	{ 1965*	8	17

(Sources) Same as Table 6, and Table 26.

(Note) \* Estimated.

Table 29. Position of Britain and Japan in the Import of the Asian Commonwealth Countries (%)

		Import from Japan	Import from Britain
Hong Kong	{ 1958	13	12
	{ 1965	17	11
Malaysia	{ 1958	6	21
	{ 1965*	11	17

Singapore	{ 1958	6	21
	{ 1965	11	11
India	{ 1958	5	20
	{ 1965	6	12
Pakistan	{ 1958	6	18
	{ 1965	10	15
Ceylon	{ 1958	9	24
	{ 1965	8	18
Total	{ 1958	7	17
	{ 1965*	9	15

(Sources) Same as Table 6 and Table 26.

(Note) \* Estimated.

Now let us compare the British and Japanese elasticity value of export to and import from this area.

Between 1958 and 1965, the rate of increase of import of this area from the world was 51.6%, while the rate of increase of export of Japan to this area was 144.8% and that of Britain 6.8%. The Japanese elasticity value of export is 2.80, and that of Britain is 0.13. The former is more than twenty times the latter. This means that Japan is more than twenty times as sensitive as Britain to the increase of import of this area.

In a similar way, both Japanese and British elasticity values of import from this area are calculated as 1.66 and 0.12 respectively. The import elasticity value of Japan is more than ten times larger than that of Britain.

This implies, as in the case of the export elasticity value, Japan is far more closely related to this area's trade than Britain.

Table 30. British and Japanese Elasticity value of export and import from the British Commonwealth in Asia (1958-1965)

Rate of Increase of Import in the Asian Commonwealth (A)	51.6%
Rate of Increase of Japanese Export to this area (B)	144.8%
Rate of Increase of British Export to this area (C)	6.8%
Export Elasticity Value of Japan $\frac{(B)}{(A)}$	2.80
Export Elasticity Value of Britain $\frac{(C)}{(A)}$	0.13
Rate of Increase of Export in the Asian Commonwealth (D)	41.4%
Rate of Increase of Japanese Import from this area (E)	68.7%
Rate of Increase of British Import from this area (F)	4.9%
Import Elasticity Value of Japan $\frac{(E)}{(D)}$	1.66
Import Elasticity Value of Britain $\frac{(F)}{(D)}$	0.12

(Sources) Same as Table 26, and IMF. International Financial Statistics.

IV

Japanese export expansion to this area is chiefly due to the growth of machinery export. Keeping pace with the progress of industrialization in this area, the demand for machinery will certainly increase. In order to increase further the export of machinery, Japan must win in international competition with other leading industrial nations. Japan enjoys an advantage in the export of light machines, such as cameras, transistor-radios, tape-recorders, electric fans and so on, but is not so strong in the export of machine tools, heavy electric machines, construction machines, rolling machines and so on. (See Table 31). It is, therefore, necessary for Japan to increase her competitive power in the field of heavy machines.

Table 31. Share of Japan, Britain and other Industrial Nations in the Import of Machinery into the British Commonwealth in Asia (%)

	Share of Japan	Share of Britain	Share of other industrial nations
India: (1963/64)			
Machine tools	2.3	23.6	W. Germany 22.1
Heavy Electric Machines	3.8	23.7	U.S.A. 26.0
Rolling Machines	2.1	—	W. Germany 30.6
Agricultural Machines	6.8	24.8	W. Germany 15.1
Construction and Loading Machines	3.8	24.5	U.S.A. 30.6
Hong Kong (1963)			
Transistor Radio	85.0	1.5	Netherlands 11.0
Radio and Parts	83.4	9.2	U.S.A. 2.6
Camera	76.9	—	W. Germany 16.3
Tape-Recorder	71.6	—	W. Germany 9.4
Electric Fan	63.1	—	China (Mailand) 12.0
Passenger Car (1600 cc.)	8.5	49.8	Italy 17.7
Truck (more than 3 tons)	1.0	97.5	U.S.A. 1.0
Malaysia (1963) (Former Federation of Malaya)			
Motor-Cycle	49.5	—	Italy 38.2
Passenger Car	6.6	52.8	W. Germany 18.9
Machine Tools	2.3	30.4	W. Germany 7.3

(Source) Japan External Trade Organization. "Kaigai Shijo Hakusho". (1965)  
(White Paper on the Overseas Markets).



## ON THE KIHANSEN (JAPANESE WOODEN COASTWISE VESSELS)

Seiji SASAKI

Coastwise shipping is still playing an important part in Japanese internal cargo-transportation; it is well proved in the recent transition of allotment-ratios<sup>①</sup> of all transport methods

	motor-car	railway	coastwise shipping	total
1953	11%	54%	35%	100%
1957	13	47	40	100
1960	15	40	45	100
1963	23	33	44	100
1964	26	32	42	100

During the middle of 1965, the Japanese coastwise fleet was composed of iron cargo-boats consisting of 3,040 vessels with 1,734,109 gross tons, 14,776 wooden cargo-boats with 857,515 gross tons, 1,793 iron tank ships with 594,882 gross tons and 618 wooden tankers with 37,846 gross tons.<sup>②</sup>

Of course, coastwise iron cargo-boats and iron tank ships are the most important. However, it is certain that wooden vessels, either general cargo-boats or tank ships, still play a fairly substantial role. These wooden vessels are, on the whole, popularly called the "Kihansen". This is the subject for study in this article.

### I

As stated previously, Japanese coastwise vessels are most popularly classified into three kinds, ordinary-sized iron ships, small-sized iron ships and wooden ships, except for the distinction between general cargo ships and tank ships. It has also been mentioned already that wooden coastwise vessels are called "Kihansen" in the most common sense. But the concept of Kihansen is itself fairly complicated and puzzling as the whole construction of Japanese

<sup>①</sup> *cif.* White Book of Japanese Shipping 1966, P. 128.

<sup>②</sup> Except for ships used for both coastwise service and foreign service, iron cargo-boats and iron tankers for pure internal traffic were 1,457,871 gross tons and 571,832 gross tons respectively. The classification of coastwise vessels at the end of 1965 shows little change as follows: iron cargo-boats 1,359,000 gross tons, wooden cargo-boats 856,000 gross tons, iron tankers 574,000 gross tons and wooden tankers 38,000 gross tons.

coastwise sea-transportation is not so simple. Moreover, their actual condition is quite unknown because there has been no investigation made yet. Without a clear comprehension of their situation, role, and contribution we can not predict the present and future of Japanese coastwise shipping. In order to understand the whole problem of Japanese coastwise transportation we must exert efforts to study the Kihansen further. This is the purpose of the present article and has been the main objective of our investigation through the past two years.

“Ki-han-sen”, the three Japanese words or Chinese characters, bring to mind a sailing-vessel, because “han” stands for “sail”. Students who are not acquainted with shipping and transportation often ask the question as to whether the Kihansen is a wooden sailing-vessel. It is true that most Japanese people do not regard them as steamers or ships sailing under their own power. The Kihansen in these days, however, does not have sails. Though we can occasionally see the smaller Kihansen sailing before the wind, this is a rarity. At present, all of these ships do not use sails. The sail is only used to assist in speeding up or in saving fuel. The ship navigates under her own engine, even if it is a very simple old type one—the so-called “Yakitama-engine”—, so the Japanese Kihansen is firstly and fundamentally defined a small wooden steamer.

Though the Kihansen is apt to be understood as meaning a sailing vessel or a compromise between a sailing vessel and a steamer not only ideographically but from the point of its historical origin of development, its present status is only that of a wooden steamer, and that alone. Even the actual historical origin of the Kihansen was evidently after the age of steamers, not before. They also did not appear during the transit process from sailing-vessels to steamers. As Japanese coastwise trade and geographic conditions have unique characteristics, people began to seek a special suitable coastwise vessel in place of both the too large iron steamers and the declining sailing-vessels, and began to exploit the Kihansen. In so far this wooden steamer was a substitute not only for sailing-vessels but for iron steamers.

While the Kihansen can in its first meaning be grasped as a coastwise wooden steamer as aforesaid, there is a delicate shade of meaning between the Kihansen and a wooden steamer or a wooden ship. The wooden ship or wooden steamer is clearly of a larger concept than the Kihansen which is mainly used to transport cargo. Passenger-boats made of wood are excluded just as are special wooden cargo-ships, for example, fishing-boats, barges and jolly-boats, are not called by this term. In this sense we must be cautious of Japanese governmental statistics, where only wooden ships are shown in

general. The wooden tanker is clearly included in the concept of the Kihansen in our shipping circles, though many people are likely to put it beyond the ken of the kihansen.

On the other hand, ocean-going wooden cargo-steamers are not included in the popular concept of the Kihansen. The latter is only engaged in coast-wise traffic along the coasts of our island empire. These are the main characteristics and the rough outline of the Kihansen, the special coastwise wooden cargo-steamer of Japan.

## II

The Kihansen has of course its own *raison d'être*, history and economic effect, while it is apt to be regarded as a very old-styled small ship with limited function or activity field. It is difficult to conclude imprudently that the Kihansen must soon give place to the iron-steamer—especially, the so-called small-sized iron ship—, which replaced sailing-vessels or wooden ships about a century ago. Efforts for obtaining a more efficient ship must be made by the owners of the Kihansen themselves and they must seek the advice of the government, shipbuilders, and specialists in this field. It may consequently lead to a new revolutionary ship taking the place of the Kihansen. However, the Kihansen is today engaged in actual cargo traffic and is making a really important contribution to Japanese industries. Many shipowners and crew members make their living by ownership and operation of the Kihansen. Without a clear understanding of the actual conditions and services of the Kihansen we can not predict its future nor suggest substitutes.

The tonnage of the Kihansen (wooden ship) and their transport volume (ton-kilometer) are not small and have not declined during the past several years, even if percentages for the whole are gradually dropping. In October of 1965 the gross-tonnage of the Kihansen of 885,000-tons, accounted for 30% of all coastwise ships (2,950,000 gross tons), and the transport volume amounted to 96 hundred million gross tons (12% for the whole). Other governmental statistics show the tonnage of the Kihansen as follows :

	vessels	gross tonnage (1,000 gross tons)
1961 (July)	26,118	1,114
1962 ( " )	26,251	1,126
1963 ( " )	26,325	1,134
1964 ( " )	15,394	896

The great difference between 1964 and the three years prior seems to be due to change in statistical methods, for such a large-scaled decline of over ten

thousand vessels can not occur suddenly within only a year. Although we do not yet have truly reliable statistics for the Kihansen, the whole gross tonnage will amount to about 850,000 to 1,150,000.

### III

The majority of Kihansen shipowners are so small in scale that they own only a single vessel. A minority own a few wooden vessels including very small-sized iron-vessels. In 1965 these petty shipowners organized the "Zen-koku-kaiunkumiai-rengokai" (National Association of Coast-wise Shipping Guild) together with the operating agents and treating agents of the Kihansen. The last is very curious group controlling the Kihansen as cargo-brokers or charterers. (They are not only the owners of the Kihansen but the operators as well). On the other hand some large or middle-scaled coastwise shipping companies which own or operate a few Kihansen take part in the association under certain conditions while the more substantial stiff-necked Kihansen shipowners have not yet joined this national association, even though they do form some local associations. So the national association is not a simple and perfect organization, but the government has reason to be proud of it because it has succeeded in organizing over 90% of the Kihansen interests.

As of April 1965, the association had control of about 590,000 gross tons of the Kihansen (see the following table). From the above-mentioned whole tonnage of Kihansen for the same period of 896,000 gross tons, the percentage

	association data		our investigation					
	vessels	gross tons	Cargo boat		Tanker		Total	
			vessels	gross tons	vessels	gross tons	vessels	gross tons
Hokkaido district	26	4,627	21	3,673	—	—	21	3,673
Tohoku district	76	7,246	78	7,162	—	—	78	7,162
Hokuriku district	31	1,714	32	1,830	—	—	32	1,830
Kanto district	796	56,937	235	17,204	8	514	243	17,718
Tokai district	263	17,522	255	16,682	—	—	255	16,682
Kinki district	429	39,508	322	21,028	7	375	329	21,403
Chugoku district	2,254	159,826	1,653	122,898	34	2,344	1,687	125,242
Shikoku district	1,734	145,935	1,312	94,659	29	1,510	1,341	96,167
Kyushu district	2,070	154,742	1,736	156,381	3	230	1,739	156,611
Total	7,889	588,057	5,644	439,246	81	4,963	5,725	444,209

would be 66. We have succeeded in investigating 444,000 gross tons of ships belonging to this association. Taking into account the lapse of three months, our investigation covers about three quarters of the association's controlled tonnage, and comes to about half of the whole registered tonnage.

From this investigated tonnage and shipowners (agents) we were able to grasp some characteristics quite easily, especially regarding the local inclination, the average size of vessels and local differences, the limited ownership and connection with ownership of small-sized iron steamers, etc. Only the inclination and the average size will be taken up in this article.

#### IV

There are only a few Kihansen and owners in the northern or eastern parts of Japan. Among the components of the Zenkoku-kaiunkumiai-rengokai 25 wooden vessels (about 4,500 gross tons) belong to Hokkaido, 75 vessels (about 7,000 gross tons) belong to the Tohoku district and 31 vessels (1,714 gross tons) to the Hokuriku district. We can also find nearly the same number of shipowners (partners) in each district. There are about twenty thousand gross tonnage of Kihansen in each of the three districts of Keihin, Tokai, and Mihe. However, the greatest number of Kihansen are concentrated in western part of Japan consisting of Kyushu, Chugoku, and Shikoku as the following table indicates. This strengthens the general opinion that the western half of Japan is an enclosure for the Kihansen and the Setonaikai is their main navigation route.

	association data		our investigation	
	gross tons	percentage	gross tons	percentage
Kyushu	154,742	26	156,611	36
Chugoku	159,826	27	125,242	28
Shikoku	145,935	25	93,887	21
Others	127,554	22	68,468	15
Total	588,057	100	444,208	100

According to this statistics of the association 78% are concentrated in western part of Japan. According to the author's investigation, in which most western Kihansen and their members are omitted, because no answers were forthcoming to our inquiries, the concentration ratio comes to 85%. As it was impossible to get sufficient data, especially in Chugoku, Shikoku, as well as in the Hanshin district, all percentages in these three western districts are not reliable. It is better to understand that each district occupies nearly the same ratio,—a quarter each as given in the association data.

The clear concentration toward the western part of Japan is in itself a most noteworthy characteristic, and furthermore has direct connection with the next problem of local differences in the average size of the Kihansen.

## V

A recent development in the construction of these ships can be found in their tendency to unite quality with quantity. Qualitative improvement and change take place along with quantitative expansion. Whenever any reasonable or revolutionary development is done in the scope of the ship-structure, it is accompanied by a substantial magnification in the size of the ship. At least, in this effort to exploit a new kind of ocean-going ship we can expect simultaneously an enlargement in the size of the ship. As it is the ambition of almost all shipowners to own a large superior ship, this is only natural and a popular tendency in the developmental history of ships.

But our Kihansen shows a strange tendency. Rather than becoming larger their average size has recently had the tendency of becoming smaller. Mr. Sadaji Ito, the ex-president of the Kinkai Yusen Co., Ltd. and now the chairman of the underwriting company for wooden vessels, emphasizes roughly a noteworthy tendency in his recent article in a pamphlet titled "Wooden Vessels Observed from the View-point of Insurance" as follows; "After World War II the size of the Kihansen has been gradually concentrating toward a middle-size, between 50 gross-tons and 100 gross-tons, by enlarging small vessels on the one hand while decreasing the size of large vessels on the other hand. ...."

"..... The average size of wooden vessels insured shows such an evident decline during the fifteen years from 1951 to 1965 as indicated in the following table.

1951	1955	1960	1965
111 gross tons	102 gross tons	98 gross tons	92 gross tons

While the owners of the smaller Kihansen have attempted to enlarge their ship-size, the owners of the larger Kihansen aim conversely at building smaller vessels".

He also describes the fact that ordinary owners of wooden vessels cannot build small-sized iron ships because of their lack of funds, and that they are very anxious about the operation and reimbursement from small-sized iron ships.

The number of large-sized Kihansen over 200 gross tons are clearly showing a decrease even in official statistics, though Mr. Ito does not point out the concrete sizes of the large-sized Kihansen.

1951	1956	1961	1964
327 vessels	209 vessels	184 vessels	155 vessels

On the other hand, wooden vessels from 20 to 100 gross tons have been increasing very rapidly throughout this same period. Both tendencies may be taken as an illustration of the concentration toward middle-sized Kihansen to a certain extent, even though there is also a distinct increase of wooden vessels from 100 to 200 gross tons.<sup>③</sup>

The result of our investigation also proves the same overwhelming superiority of middle-sized or smaller-sized Kihansen and furthermore shows the local differences in average sizes. For each group of the Zenkoku-Kaiunkumiai-Rengokai the average size is calculated as shown in the next table.

Hokkaido district	{ Hokkaido branch	200 gross tons	
	{ Hakodate branch	124	"
Tohoku district	{ Aomori branch	62	"
	{ Iwate branch	102	"
Hokuriku district	—Nigata branch	57	"
Kanto district	{ Kanto-coastwise branch	64	"
	{ Yokohama branch	74	"
Tokai district	{ Shizuoka branch	95	"
	{ Mikawa branch	45	"
	{ Chubu branch	133	"
	{ Mihe branch	63	"
Hanshin district	—Osaka branch	84	"
Chugoku district	{ Okayama group	61	} 74 "
	{ Hiroshima group	80	
	{ Yamaguchi group	80	
	{ Shimane group	80	
Shikoku district	{ Ehime group	82	} 72 "
	{ Kagawa group	56	
Kyushu district	{ Fukuoka group	101	} 90 "
	{ Saga group	74	
	{ Nagasaki group	78	
	{ Kumamoto group	77	
	{ Kagoshima group	32	
	{ Miyazaki group	121	
	{ Oita group	109	

③ These middle-sized Kihansen show a changeable development as follows, 1,007 vessels in 1951, 930 in 1956, 1,552 in 1961 and 1,823 in 1964.

On one side we can find only two groups, having a gross tonnage below 50, the Mikawa with 45 gross tons and the Kagoshima with 32 gross tons. On the other hand there are four local branches, Hokkaido, Hakodate, Tohoku and Chubu, and three prefectures, Fukuoka, Miyazaki, and Oita having a gross tonnage of over 100. The majority are concentrated within the limits of 50~100 gross tons. Though there are three prefectures with over 100 gross tons, the average size of the all Kyushu district comes to 90 gross tons. The fact that Kyushu, Shikoku (with total average of 74 gross tons) and Chugoku (with total average of 72 gross tons) constitute the central part of the Kihansen group, it makes 78 gross tons as their national total average size. It is very important and significant that the national total average and each average of three main districts which is investigated by our hands are less than 90 gross tons and more than 70 gross tons. It is in fact curious in comparison with a distinct magnifying tendency of ocean-going vessels.

We must also give attention to the local difference of the Kihansen average-size. Hokkaido shows the largest average size of 200 gross tons, while only a few vessels are owned and operated in this district. This is the same condition with the case of coasting iron-ships. Compared with this fact, the western part of Japan which is the main sphere of influence of the Kihansen shows generally a smaller figure of average size. And that we can find out a distinct difference among each local branch. For example the average size of Ehime Kihansen is 82 gross tons and that of Kagawa Kihansen is 56 gross tons inside of the Shikoku district. In the Kyushu district the smallest average size (32 gross tons) of Kagoshima prefecture has a difference of about ninety gross tons from the largest 121 gross tons of Miyazaki prefecture. All prefectures belonging to the Chugoku district show almost similar average sizes; at least, those of the three prefectures are the same. It is clear that such local differences in the Kihansen average size must be closely connected with many inner and economical conditions, though we have no chance to take up the phase in this article. Here we will only call public attention to the fact.



## APPROACHES TO COMPANY HISTORY

Tadakatsu INOUE

### I

In an essay titled *Approaches to the History of Individual Business Units* (Kobe Economic and Business Review, 1966), the writer examined the various points of view in the discipline of business or entrepreneurial history from which the history of a business unit—a business man, a firm, or a company—would be written: a group of historians who follow Professors N. S. B. Gras and H. M. Larson, and their associates in Harvard Business School would proceed from the standpoint of administration; a group of the Marxians in Eastern Germany who have been increasingly interested in research and writing on the histories of individual units would consider the events from the standpoint of class strife; a group of economists who respond to Professor Schumpeter's theory of "neue Kombination" or "innovation" would emphasize the relationship of creative entrepreneur to economic development; and a group of scholars led by Professor A. H. Cole would be interested in the economic and social significance of the events occurred in an entrepreneurial world. In this paper, however, the writer will arbitrarily hold one of these standpoints, that is, the administrative point of view which was originally illuminated by Professors Gras and Larson, and examine another problem concerning the nature of the history of individual business units.

As everyone can find, the history of a business unit holds a preeminent position in research in business history. Most of the books in *Harvard Studies in Business History*, the first series of monographs in business history issued under the auspices of the Harvard Business School since 1931, and in *Veröffentlichungen der Wirtschaftsgeschichtlichen Forschungsstelle e. V.*, a series of publications in business history founded in 1949 in Hamburg by the Center's president Dr. Ernst Hieke, are either biographies of business men or the histories of companies. Most of the articles which fill up the periodicals in business history, that is, *Business History Review* in U.S.A., *Business History* in England, *Tradition: Zeitschrift für Firmengeschichte und Unternehmerbiographie* in Germany, *Histoire des Entreprises* in France, and *Business Archives and History* in Australia are the histories of individual business men and firms. This is also the same as to the Japanese periodical issued recently under the

title of *Keieishi-gaku* (Japan Business History Review).

It must be noted, however, that, while the history of individual business units occupies a high position in the study of business history, it is not the only subject, area, or type of study that call for research in the field of business history. It is only prejudiced opinion to identify business history with business biography and company history. There are, to be sure, other approaches to the history of business. According to Professors Gras and Larson, there are the history of functional divisions of business, the history—not the economic but the business history—of an industry or a trade which should ideally present a generalized picture of the administration and operation of the business units which have made up the industry or the trade, and, of course, the general history of business which would include the story of individual men and companies, industries, and special topics. Then, what position does the history of individual units hold in the whole system of business history?

## II

First of all, the history of individual business units is the primary step out of which all other business histories must be constructed; the history of industries, of aspects of business, and of business systems or periods in the history of business can be written only from an understanding of how men and firms have worked and developed. It is impossible to write the business history of an industry, such as cotton textiles or meat-packing, until the histories of significant units within a given industry have been written. Similarly the studies of topics or segments of the history of business, such as cost accounting or labor management can be approached through individual business histories or through research in the pertinent records of individual companies. And, of course, the great task of tracing the general historical development of business can be forthcoming only after we have had an adequate number of special studies of business men and firms. The history of the unit is, therefore, a necessary contribution toward a larger synthesis. It must be recalled here that a considerable group of men and women who worked with the late Professor Gras in the early days of business history were patient enough to concentrate heavily on research in the records of men and firms.

The second implication of the writing of the history of individual men and firms is the creation of the cases through which the larger whole in the history of business would be observed. The reason for this is simply the fact that every particular story will illustrate the general. For example, the story of the Massachusetts Bank, the first commercial bank in Boston, will be more or less

illustrative of early American banking problems and bank management in general; the narrative of Cornelius Vanderbilt who died worth over \$100,000,000 in 1877 will have some reference to a general pattern of behavior of the American business men of that period; and the history of the General Motors Corporation under Alfred P. Sloan will present some aspects of changes occurred in the internal organization of American giant corporations. It may be said, therefore, that every particular case on various periods, on various countries, and on many aspects of the work of business may be used as a tool for getting a general view on the historical development of business, especially when we have not yet built a general body of business history.

It must be kept in mind, however, that in the study of a single firm there is relatively little likelihood that broad generalization will be made because the scope of material is necessarily restricted. In each instance, therefore, we should realize the limit of the discoveries and, then, learn which part or aspect the particular firm being studied will present in the larger whole. Someone may say, however, that he has not yet learned what the larger whole is and therefore that he is in no position to consider how the firm fits into the general. Perhaps, however, such contradiction will be gradually overcome as the literature on the histories of men and firms is being created and a general body of business history is being developed.

### III

As we have seen, the study of individual business men and firms is of unequal value as a necessary preliminary to the development of large historical studies of aspects of business, of industries, and of nations. It is also of nearly equal value as an instrument to be used in observing the larger whole in the history of business especially where no general body of business history is prepared. But if the implications of the writing of histories of men and firms are confined to these points, the histories of this type will be materials or tools for others and not things to be memorized for their own sake. To be sure, there are some historians who doubt of the possibility of the history of individual business units as an independent field of historical research and study; they wonder if the history of individual firms or companies can be the subject of the scholarly study because the potential readers will be limited largely to a small group of persons who are closely related to the unit.

It is true that there is a large number of histories of individual business units that should submit to such criticism. The most representative type of them is the ordinary company history written to answer the need of the com-

pany for the celebration of a 50th, 75th, or 100th anniversary. It is often written from the inside and on behalf of the company; and, when it is unfair to reality, it must be regarded as propaganda. And, even if it exhibits no propaganda, it is often a miscellaneous array of facts which are not woven into a synthesis. In other words, it has no clear subject on which its research and presentation should be focused. Thus, this miscellaneous type would not be available to a wide array of readers, though it may satisfy the insiders or antiquarians who are full of old memories on the company concerned.

It should be remembered, however, that what we are considering in this paper is not the ordinary company history as mentioned above, but the business history of the unit written from the standpoint of administration. And if the story of the unit is presented as the history of such type, it will be not only indispensable in the writing of more synthetic history of business but also of unique value as a body of historical information to be memorized for its own sake. Then, on what grounds can we say so?

First, the business history of individual business units of which we speak has a central theme to which to focus its research and presentation; it concentrates on the history of business administration, that is, of policy, control, and management. It is right here that the history of this type is in contrast to the ordinary company history that provides only a miscellaneous array of facts which are not woven into a synthesis.

Second, the administrative history of individual firms is interested in the area of choices of alternatives in organizing and coordinating various factors in given situations to accomplish an end. Obviously, such treatment comes from the recognition of the fact that, while business units must operate within the conditions in which they exist, there are still many alternatives of choices made by the units. This approach must be compared with the economic determinism that leaves no important place for free choice or decision.

Third, the history of the administration of business units thinks of things as being done or in a process of administration. As mentioned above, every unit has freedom of the will to guide its action. To the unit, however, knowledge cannot be made ready or complete in time for action. Thus the unit have to proceed on a-trial-and-error basis. Differing from the economic history that think of things as done, this approach puts emphasis on the process of trials of individuals in meeting the needs and opportunities created by a changing environment. And in presenting the flow of such efforts, the history of a business unit has a prominent place because it comes nearest to recording the exact nature of the administration of the unit.

Now, it will be clear that the administrative history of a business units, regardless of its name or fame, provides a body of historical information which is useful to a wide array of persons including, of course, business men and their candidates who are in need of developing the larger perspective and insight in the administration of business.

## CUMULATED COST RATIOS FOR THE ECAFE COUNTRIES<sup>\*</sup>

Nobuko NOSÉ

### I Preface

Twice before the author has published analyses of cumulated cost ratios for the Japanese economy. The present study starts from the same point as the previous analyses and attempts to investigate the cumulated cost ratios for other ECAFE countries, i.e. Australia, India and Malaya to link it up with the previous studies. As before, we intend to observe the structure of final cost factors in these countries from two aspects: cost cumulation and destination cumulation. The models and symbols which we use in this paper are the same as before. The results of cumulation from these two aspects are shown in Tables 1 to 6.<sup>1)</sup> Based on these tables and data about Japan and the U.K. which we have estimated in previous works, we intend to present the economic features of the above three countries.

### II Model for Computing

Cumulated cost analysts attempt to estimate the cumulated cost ratios by two aspects of cumulation: One aspect is to estimate the ultimate distribution of final factor costs payment, i. e. imports, wages and gross profits, indirect tax and subsidies by industry group and the other is to estimate the ultimate distribution of these final factor costs payment by industry group to produce final output destined to final destination categories, i. e. consumption, investment, government expenditure and exports.

Final costs factors consist of three categories of costs: costs of primary factors of production, imports for intermediate products from the rest of the world and costs which are institutionally added. Wages and salaries and profits are costs of primary factors of production, while subsidies and indirect tax are included in institutional costs. All kinds of these final costs in an economy are paid either directly or intermediately by the industry group.

According to the stages where costs are paid by the industry group, cumu-

---

\* The author has profited very much from Dr. G. Stuvell's kind guidance and suggestions. Also the author wishes to acknowledge particularly Mr. S. Tamino's help in computing the data.

lated cost analysts define the final factor costs as direct cost (or non-cumulated cost), intermediate cost and total cost (or cumulated cost). Direct cost is the total of final factor costs paid directly by each industry concerned. For example, wages which are received by laborers' households from an industry, say  $j$  who employs the laborers, are direct labour cost. Intermediate cost is the final factor cost which is paid by other industries, say  $r$ , who deliver the intermediate products to industry  $j$ . For example, imports which are paid directly by  $r$  to make an intermediate product destined for  $j$  as  $j$ 's input, is called  $j$ 's intermediate imports. The total of intermediate cost and direct cost is total cost. And direct cost ratios, intermediate cost ratios and total cost ratios are defined as ratios of direct cost to total sale, ratio of intermediate cost to total sale, ratios of total cost to total sale respectively.

We use the assumption of a certain fixed relationship in inter-industry delivery of goods and services. As we have presented in previous papers, the analytical model for estimation of cumulated cost ratios is as follows:

For cost cumulation by industry group,

$$Q = R(I - P)$$

$$\text{or } R = Q(I - P)^{-1},$$

where  $p = (p_{ij})$ ,  $Q = (q_{kj})$ ,  $R = (r_{kj})$ ,  $I$  is a unit matrix,  $p = \frac{x_{ij}}{z_j}$ ,  $q_{kj} = \frac{y_{kj}}{z_j}$ ,  $r_{kj} = \frac{z_{kj}}{z_j}$  respectively. And in this case,  $x_{ij}$ ,  $y_{kj}$ ,  $z_{kj}$ ,  $z_j$  are  $j$ th industry's intermediate cost, direct cost, total cost and total sale respectively, thus  $p_{ij}$ ,  $q_{kj}$  and  $r_{kj}$  are intermediate cost ratios, direct cost ratios and total cost ratios respectively.

And as for cost cumulation by destination categories,

$$S = RW$$

$$\text{or } S = Q(I - P)^{-1}W,$$

where  $s = (s_{jk})$ ,  $w = (w_{ik})$ , and in this case  $s_{jk}$  is the cumulated cost ratios of final factor cost  $j$  for making goods and services destined for final destination category  $k$  and  $w_{ik}$  is the ratio of  $W_{ik}$  to  $T_k$  and  $W_{ik}$  is the amount paid for goods and services by  $k$  to industry  $i$  and  $T_k$  is equal to  $\sum_{i=1}^n W_{ik}$ , and  $s_{jl} = \sum_{i=1}^n r_{jl} W_{ik}$ ,  $r_{ji}$  is the cumulated  $j$  ratio by industry  $i$ .

Inter-industry transaction tables provide an empirical basis for an estimation of a cumulated cost analysis. Using the above equations and input-output tables in the three countries, we estimate the direct cost ratios, intermediate cost ratios and total cost ratios by industry group and by final destination categories.

### III Result

Table 1.1 presents summary of the results of the cost cumulation in these three countries. It indicates that in Australia, India and Malaya direct rates of turn-over value are 60%, 62.9%, 78.1% respectively and the average intermediate costs ratios are 40%, 37.4%, 21.9% respectively. It is apparent from the table that the Australian direct rate of turn-over value is relatively small while the average intermediate cost ratio is relatively high, and that the rate of turn-over value in Malaya is relatively high while the average intermediate cost ratio is little. Comparing Table 1.1 with Table 1.2 the rates of turn-over value of these countries are relatively high and the average intermediate cost ratios are, on the contrary, low.

Tables 2, 3 and 4 present the ultimate distribution of final factor costs in the above three countries. From these tables, we can observe the characteristic features of these countries' cost structures as follows:

i Cumulated wage ratios.

In Malaya in the service, rubber planting and transportation industries, the direct wage ratios are considerably high while in the dwelling (housing), metal, and tobacco industries, the direct wage ratios are low. In Australia, in the finance and wood products industries the direct wage ratios are high while the mineral oil, dwelling, business services industries are in the low direct wage ratios group. Generally speaking, Malaya's direct wage ratios are lower than those of Australia, as in the former the average Per Capita is 183 while in the latter it is 266.

Tables 1.1 and 1.2 indicate that even in Malaya the average direct wage ratio is higher than that in Japanese industry of 161.1 and that in Australia the average ratio is less than the average direct wage ratio of the U.K. industry of 314.8.

The intermediate wage ratio of Malaya by her industry group are generally low, as Table 3 shows its maximum is the construction industry ratio which is 38.6, while the average intermediate wage ratio is 5.3. This tendency is the result of the low degree of inter-industrial relationship in Malaya, that is, her industries do not buy much from other home industries but from foreign countries and of her relatively low wage ratios. On the contrary, in Australia, there are industries whose intermediate wage ratios are relatively high. Construction, metal industries, non-metal industries in Australia are typical cases.

Table 1.1 presents the average intermediate wage ratio in Malaya which is much less than the ratio in Australia which are slightly higher than those of Japan of 177 and the U.K. of 196.



As for total wage ratios, Australian ratios are higher than Malayan ratios, especially, in the construction, trade, metal industry groups where the ratios are high. These high total wage ratios by the Australian industry group are the result of the relatively high degree of inter-industrial relationship and of the high wage rate. But Table 2 indicates that even in Australia, there are some low total wage ratio groups, especially in mineral oil, dairying and the tobacco industry groups. Table 3 indicates also that even in Malaya, there is an exception; i. e. the rubber planting industry's total wage ratio is high because its intermediate wage ratio is considerably high.

Table 1.1 and 1.2 indicate that the average total wage ratio in Malaya of 237 is the lowest and less than the ratio in Japan which is 338, and that the average ratio in Australia is 464, higher than the ratio in Japan but lower than that in the U.K. which is 511.5.

#### ii Cumulated profit ratio

Table 3 indicates that in Malaya the dwelling, fishing, agriculture and rubber planting industries are high direct profit ratio groups while the metal, and paper industries are the low direct profit ratio groups. On the other hand, Table 2 shows that in Australia the dairying, dwelling and agriculture industries, direct profit ratios are high while in the dairy products, construction, and tobacco industries the ratios are low. Generally speaking, direct profit ratios in Malaya are higher than the ratios in Australia as the former's average is 276 and while that of the latter is 249.

Both average ratios are higher than average ratios of Japan of 161 and of the U.K. of 175, as Tables 1.1 and 1.2 present.

The intermediate profit ratios in Malaya are much lower than those in Australia. For example, the average intermediate profit ratios of the Malayan industry and of the Australian industry groups are 94 and 158 respectively. Consequently, the total profit ratios of Australia are greater than those of Malaya. Tables 2 and 3 present maximum ratios in Australia, i. e. the construction industry's total profit ratio of 944 is higher than that of Malaya whose dwelling industry's ratio is 930 while the former's average total ratio of 408 is also higher than the latter's average total profit ratio of 370. These average total profit ratio is higher than the ratio in the U.K. of 283 which is lower than the ratios in Japan of 413, because that the average intermediate profit ratio of 251 is relatively high while the ratios in the U.K. of 108 are low respectively as Table 1.2 shows. From Table 4, we can analyse neither profit ratios nor wage ratios of the Indian industry group.

#### iii Value added ratios

Table 4 shows that the ratios of value added are not divided in detail. This is caused by the fact that primary costs of production are not decomposed in the Indian input-output tables. In order to make a comparison of Indian value added ratios in Malaya with those of other economies, we must analyse the ratios with value added ratios or primary costs of production ratio in Malaya and in Japan. As Table 1.1 shows, Malayan average direct primary costs of production ratio is 460 and exceeds slightly the Indian average value added ratio of 458. These ratios exceed the Japanese ratio of 384. In the rubber plant, service and dwelling industries in Malaya the ratios are high. The maximum ratio in the rubber plant industry is 976, and the minimum ratio is that metal industry of 176. In India, the forestry, iron ore and agriculture industries' ratios are high. The forestry ratio which is the highest of all Indian industries is 923, and the rubber industry whose direct primary cost of production is minimum is zero. As for the intermediate value added ratios in these two countries, the Malayan maximum is that of the construction industry of 105.4 while the Indian maximum is the construction urban industry of 202.3 and the minimum ratios are those of the rubber, crude oil, and forestry industries of zero respectively. The average intermediate value added ratio in Malaya of 148 is lower than that of India of 243. These average intermediate ratios in the two countries are much lower than the ratio of 500 in Japan.

Table 3 shows that the total value added ratios are high in the construction, trade, and rubber processing industries and that the ratios are low in the paper and clothing industries in Malaya. Table 4 indicates that the ratios in the construction, food grain, and railways industries are high while low in the rubber, crude oil petroleum products, and electricity industries in India. As Table 1 shows, the average value added ratio in Malaya of 607.7 is smaller than that in India of 701 and in Japan of 885.5.

#### iv Import ratios

Import ratios, especially the direct import ratios indicate the measure of dependency of an economy on foreign economies. In an industry group whose ratio is high, the value added ratio is usually low and vice versa. For example, as Table 2 shows, in Australia the mineral oil industry's direct import ratio of 521 is the highest in the economy while the service, grains, gas and water industries ratios are low. The products of the latter industries are independent of import and their wage ratios are higher than the former. In Malaya, the textile, paper, and tobacco industries are in the high direct import ratios group while dwelling, bank, and forestry are in the low ratios group, and in the former industry group the value added ratios are relatively low. Among them,

the textile import ratio is 697 and the highest in Malaya. In India, the rubber, crude oil, and other metal industries are in the high direct import group while construction, iron ore, and forestry are in the low ratio group and in the latter industry the value added ratios are high. Table 4 indicates that the rubber's direct import ratio is 1000 and is the highest in India.

The average direct import ratios in Australia, Malaya and India are 78, 171 and 171 respectively and all are higher than the ratio in Japan of 57.0. The Malayan and Indian ratios are higher than that of the U.K. which is 106.7. Tables 2, 3, and 4 indicate that in the three countries, the direct import ratios are higher in industries which produce or process non-natural products i. e. crude oil and in the heavy industries i. e. chemical or iron and steel industries. Tables 2, 3, and 4 indicate that in the three countries the direct import ratios are higher in non-natural products i. e. raw materials and in industries which process the products. Table 3 indicates that in Malaya the intermediate import ratios are low because her intermediate costs ratios are generally low. The maximum is in the construction industry whose ratio is 234. In India, the situation is different and the ratios are unbalanced, as in the rubber, forestry and crude oil industry group the intermediate imports ratios are 0, and maximum rate which is the construction industry ratio of 940 is higher than Malaya maximum and that of Australia of 466. In Australia, industries being more connected with each other than in the other two countries, the intermediate import ratios are higher than in the latter two, its average being 61.7. In the trades and transport, construction, business services industries intermediate import ratios are relatively high while the water, fishing and mineral oil industries are in the low rates group. As for total import ratios in Malaya in the textile, paper, and tobacco industries they are high and their maximum is the textile industry of 697. In the banking, forestry, services, and rubber plantation industries the ratios are low. In Australia, the mineral oil, trade, clothing, metals and vehicles industries have high total import ratios of which the mineral oil ratio of 527 is the highest of all Australian industries. On the contrary, the water, gas, and fishing ratios are low. In India, the petroleum, rubber and crude oil industries' ratios are respectively high while the coal, iron ore, and electricity industries' ratios are low. The highest ratio is the petroleum industry with 1199 while the lowest ratio is that of iron ore which is 0.07. It is apparent that among them there being a slight difference of degree in the maximum total import ratios of these countries that they are higher than that of Japan's 438 and the U.K.'s 287 while minimum ratios are lower than Japan's 18 and the U.K.'s 53. This phenomena can be explained by the following

tendencies, i.e. one industry group whose ratio is high is extremely dependent on imports while another industry group whose ratio is low or close to zero is independent of imports. In other words, their national economies are not perfectly integrated as those of the Japanese and the U.K. economies. The economy of Malaya is typical.

v Indirect tax ratios and subsidies ratios

Indirect tax and subsidies are not proper production costs but institutional costs. As Table 2 shows indirect tax is divided into custom duties and other indirect taxes of which the latter is netted out against subsidies in Australia. On the contrary, in Malaya, indirect taxes are not subdivided further nor netted out against subsidies, while as for India, there is no column for indirect tax and subsidies in Table 4. These are caused by the fact that the input-output tables in these three countries which we have used as original data are made in different manners.

At Tables 2 and 3 show, many industries are free from custom duty in Australia and receive only a little subsidies in Malaya. Therefore, it may be permissible to make a comparison of other Australian indirect taxes less subsidies ratios with Malayan indirect tax ratios and with the net indirect tax ratios in Japan and the U.K.

Table 3 shows that 16 industries are free of indirect taxes but for the rest of the industries in Malaya the indirect tax ratios are high, especially in the trade and transport, mining, and forestry industries. Through the intermediate indirect tax ratios, all industries in Malaya pay indirect taxes. In the wholesale trade, mining, and transportation industries, the total indirect tax ratios are high and are 46.7, 17.2 and 14.9 respectively. On the other hand, Australian indirect tax ratios are higher than those of Malaya, the average net indirect tax ratios i.e. the average direct ratios of 58.7, the average of intermediate ratios of 21 and the total ratios of 79.7 are higher than the indirect tax ratios of 38, 14, 52 respectively of Malaya. Comparing these ratios with Japan and the U.K. we have the net indirect tax ratios in Table 1.2 showing that the average direct ratios in the two countries are higher than Japan's ratio of 28.5 and the U.K. of 28.1, and in spite of the fact that their average intermediate net indirect tax ratios are relatively low, their total net indirect tax ratios are high. The Australian average total indirect ratios of 79.7 is highest of these countries.

The highest indirect tax ratio group is that for alcoholic drink, tobacco, and mineral oil, the ratios being 678, 593, 238 per capita respectively. On the contrary, in the dairy products industry the ratio is negative -111, which means

that subsidies to the industries whose profit ratios are low exceed indirect tax on the products of the industries. Correlations between direct cost ratios and intermediate cost ratios for all final costs categories and that between direct cost ratios and total cost ratios in the three countries are shown in Table 5.

Generally speaking, correlation coefficients between direct cost ratios and total cost ratios are high, especially the coefficient between Malaya's direct import ratios and total ratios, the coefficient between Australia's direct indirect tax ratios and total indirect tax ratios are also high. On the other hand, correlation coefficients between direct cost ratios and intermediate cost ratios are very little and in some cases negative. Comparing the coefficients in these three countries with those of Japan and the U.K.'s, we find that some of the coefficients in the three countries are lower than in the two latter countries. In Japan and the U.K. the coefficients are high especially in the latter and exceed 80% as Table 5 shows. This fact still remains to be solved.

Next, we shall analyse the cumulated cost ratios from another aspect: cumulation by final destination categories. From Tables 6 and 7, we find the following situation.

i It is apparent that in the three countries consumption performs a main role in encouraging demand for fiscal factor costs because the cumulated cost ratios for consumption items are the highest of all ratios for final destination. The order of cumulated cost ratios are consumption, exports, fixed capital formation, government expenditure and inventory formation in Malaya and Australia. In India, the order is not the same, being consumption, fixed capital formation, exports, inventory formation and government expenditure.

ii Cumulative cost quotas for consumption in the three countries are, as Table 6 indicates as follows. In Malaya, cumulative profit quotas are 36.7, import quotas 24.6, wage quotas 19.2, in Australia, cumulative profit quotas are 34.2, imports quotas 11.8 and wage quotas 32.8, while in India, cumulative value added quotas are 77.1 and imports quotas 22.9 respectively. Among the import quotas, Malaya's import quotas are the highest, followed by India while Australian imports quotas are the least. In these countries cumulative imports quotas for consumption are higher than the quotas of Japan of 8 and except for Australia they are higher than the U.K. quotas of 14.2. The tendency prevails in the cumulative import ratios for all other destination categories in the economies.

iii Cumulative cost quotas for exports in these countries are as follows. In Malaya, cumulative profit quotas, wage quotas and imports quotas are 39.3, 22.3 and 20.2 respectively, and in Australia, cumulative wage quotas, profit

quotas, imports quotas are 37.6, 46.6 and 12.7 respectively. In India, cumulative value added quotas and imports quotas are 88 and 12 respectively, it is notable that in Malaya and Australia cumulative profit quotas are relatively high and among cumulative imports quotas in the three countries Malaya's quotas are the highest.

iv Cumulative cost quotas for fixed capital formations are as follows. In Malaya, cumulative wage quotas, profit quotas and imports quotas are 32, 31 and 20.5 respectively while in Australia they are 51.3, 31.9 and 12.5 respectively. In India, cumulative value added quotas and imports quotas are 76.5 and 23.5 respectively. Among cumulative imports quotas in the three countries, the Indian quotas are the highest while the Australian quotas are the least.

Cumulative cost quotas for Government expenditures are as follows. In Malaya cumulative wage quotas, profit quotas and imports quotas are 53.7, 34.9, 9.57 respectively.

iv Cumulative cost quotas for fixed capital formations are as follows. In Malaya, cumulative wage quotas, profit quotas, and import quotas are 32, 31 and 20.5 respectively and in Australia they are 51.3, 31.9 and 12.5 respectively. In India, cumulative value added quotas and import quotas are 76.5 and 23.5 respectively. Among cumulative imports quotas in the three countries, the Indian quotas are the highest while the Australian quotas are the lowest.

v Cumulative cost quotas for Government expenditures are as follows. In Malaya, cumulative wage quotas, profit quotas, and import quotas are 53.7, 24.7 and 9.57 respectively while in Australia they are 51.3, 31.9 and 12.5 respectively. In India, cumulative value added quotas and import quotas are 60.3 and 39.7 respectively. It is remarkable that cumulative wage quotas in Australia are very high and so are those of Malaya.

vi Cumulative cost quotas for inventory formation.

It is remarkable that in India cumulative import quota is great and also these of Malaya which is 53.7. In Australia the dependency on import is relatively low but that on profit is high.

vii From the above investigation, it is now apparent that final destination categories which are labour intensive are government expenditures and fixed capital formations in Australia and in Malaya, and the categories which are profit intensive are inventory formation and exports in Australia and in Malaya, while import intensive category is the inventory formation in Malaya and in India. In India, exports and the consumption cumulative value added quotas are relatively high, so they are 'employment intensive'.

vii Other remarkable point are that investment, consumption and exports which consist of effective demand by private sectors in an economy generally depend greatly on imports or are 'imports intensive' in the three countries. For example, in Malaya and India, the inventory formation depends heavily on imports. On the contrary, government expenditure which is a target for economic policy depends very little on imports in Malaya and Australia but is 'labour intensive'. In India, even government expenditure is 'import intensive'. Thus, this explains that the cumulated cost analysis for final destination categories provides a tool for economic planning by the government. It is remarkable also that in these three countries import intensiveness is great, especially in Malaya and India. The cumulative import quotas in the two countries are greater than those in Australia, in Japan with 7.3 and in the U.K. with 11.5 as Tables 7.1 and 7.2 show.

Thus it may be permissible to conclude that any increment in final demand in Malaya and India produce higher imports and lower income than in the case of Australia, the U.K. and Japan.

### **Conclusion**

Based on the above results, we reach the following conclusions about the economic feature of the three countries.

i These economies depend greatly on imports, especially Malaya and India, as the main destination categories are import intensive and the import ratios are high.

ii Observing the import ratios and amounts of exports in the input-output tables, it is apparent that in these countries import ratios are high in non-natural products producing industries and heavy industries and the products of home-produced raw material are exported. This tendency is especially remarkable in Malaya and India.

iii In Malaya and India, the direct rates of turn-over value are high and the intermediate cost ratios are low. This indicates that they are developing countries. On the contrary, the Australian economy is relatively matured because (i) the intermediate cost ratios are relatively higher, (ii) wage ratios are higher and (iii) imports ratios are lower than the ratios of the other two countries and they export not only raw material but also processed products.

iv In these economies there are two types of industries i. e. the industry group whose import ratios, wage ratios, indirect tax ratios are very high and the industry group whose ratios are very low and some of which are often zero. This tendency of such unbalanced growth of industries is apparently observed

where we have made comparisons of cumulated cost ratios with those of Japan and the U.K. We regret that we can not divide final destination categories in the three countries more in detail, i.e. consumption into durable and nondurable consumption. Also, at this stage of analysis, we can not do further research regarding the final factor costs categories by industry groups in the countries mainly because the input-output tables in these countries are not standardized internationally. We expect and intend to improve these points in the near future. Moreover, we intend to compare the cumulated cost ratios in more countries internationally and intertemporarily. These investigations will also remain as future tasks.

**Note:**

1) N. Nosé, Cumulated Cost Ratios for the Japanese Economy in 1955, *The Review of Economics and Business Administration*, vol. 10, 1965.

N. Nosé, The concepts and measurement of cumulated costs, *Kokumin-Keizai-Zasshi*, Vol. 113, No. 3, Mar., 1966.

2) N. Nosé, *ibid.*

3) G. Stuvél, *The use of National Accounts in Economic Analysis, Income and Wealth*, series IV (London: Bowes & Bowes, 1954), pp. 319-321. Stuvél, *Systems of Social Accounts* (Oxford: Oxford University Press, 1965), pp. 227-230. G. F. Loeb, *Experience with Input-Output Analysis in the Netherlands*, *Input-Output Relations* (Leiden: H. E. Stenfert Kroese N.V., 1953), pp. 67-185. Central Bureau of Statistics, *Cumulated Cost Ratios for the Netherlands Economy in 1950*. *Statistical Studies*, No. 6, Nov., 1955, pp. 3-30.

4) The author has used Input-Output Tables of Australia 1958/59 (Commonwealth Bureau of Census and Statistics, Canberra, Australia), Interindustry Transaction of India, 1960/61 (Perspective Planning Division, Planning Commission, and Interindustry Accounts 1960 of Malaya (Dept. of Statistics, States of Malaya, KL, Malaysia) as original data. These tables are included in the Annual Reports for ECAFE countries, 1965.

5) N. Nosé, *The Concepts and Measurement of the Cumulated Cost*, *ibid.*



Table 1.1 The Average Cumulated Cost Ratios by Industry Group

Per Capita  
Continued

	Wages and Salaries			Gross Profits			Custom Duty			Net Indirect Tax			Subsidies		
	D	I	T	D	I	T	D	I	T	D	I	T	D	I	T
Australia	266	198	464	249	159	408	5.1	0.9	6.0	58.7	21	79.7			
India															
Malaya	183	54	237	276	94	370				38	14	52	-0.2	-0.16	-0.36

Note: D=Direct Cost Ratio. I=Intermediate Cost and T=Total Cost Ratios.

Table 1.2 The Average Cumulated Cost Ratios by Industry Group

Per Capita  
Continued

	Wages and Salaries			Gross Profits			Custom Duty			Net Indirect Tax			Subsidies		
	D	I	T	D	I	T	D	I	T	D	I	T	D	I	T
Japan	161.1	177.0	338.1	161.3	251.1	413.4				28.5	26.3	54.7			
U.K.	314.8	196.7	511.5	175.4	108.0	283.4				28.1	18.6	46.6			

Table 1.1

	Imports			Value Added			Unspecified Item &c.			Adjustment			Total		
	D	I	T	D	I	T	D	I	T	D	I	T	D	I	T
Australia	78	61.7	140				3.1	3.6	6.7	-59.3	-42.1	-101.4	600	400	1000
India	171	134	304	458	243	701				-3	-2	-5	626	374	1000
Malaya	171	22	193	459.8	147.9	607.7	109.98	21.59	130.57	13.2	4.53	16.78	781	219	1000

Table 1.2

	Imports			Value Added			Depreciation			Adjustment			Total		
	D	I	T	D	I	T	D	I	T	D	I	T	D	I	T
Japan	57.0	59.1	116.2	384.6	500.9	885.5	35.5	47.8	83.4				441.6	558.4	1000
U.K.	106.7	49.4	156.1										627.7	372.3	1000

## Appendix to Table 2.

Industry	Cord No.
Agriculture	1
Dairying	2
Other Pastoral	3
Forestry & Fishing	4
Coal Mining	5
Other Mining	6
Non-Metal Mine Products	7
Chemicals	8
Mineral Oil	9
Metals, Engineering & Vehicles	10
Textiles	11
Clothing	12
Grain Products	13
Confectionery	14
Jam & Fruits	15
Canning	16
Dairy Products	17
Other Food	18
Alcoholic Drink	19
Tobacco	20
Wood Products	21
Rubber	22
Leather	23
Paper Products and Printing	24
Paper Making	25
Other Manufacturing	26
Building & Construction	27
Gas	28
Water	29
Trade & Transport	30
Dwelling Rent	31
Finance	32
Personal & Government Services	33
Business Services	34

## Appendix to Table 3.

Industry	Cord No.
Agriculture & Livestock	1
Rubber Planting	2
Forestry	3
Fishing	4
Mining	5
Food Industries	6
Beverages	7
Tobacco	8
Textiles	9
Clothing and Footwear	10
Wood and Cork	11
Furniture & Fixtures	12
Paper & Paper Produces	13
Printing & Publishing	14
Leather & Leather Products	15
Rubber Processings	16
Rubber Products	17
Chemical Products	18
Non-Metalic Mineral Products	19
Basic Metal Industries	20
Metal Products, Machinery, etc.	21
Misc. Manufacturing Industries	22
Construction	23
Electricity, Water	24
Transportation & Communication	25
Wholesale and Retail Trade	26
Banking, Insurance, etc.	27
Dwelling	28
Other Service Industries	29

Table 2. Cost Ratios by Australian Industry. (1958—59)

																														Per Capita					
Wages						Profits						Custom Duty						Other Indirect Tax Less Subsidies						Imports of Goods						Other Imports					
Cord No.	D	Cord No.	I	Cord No.	T	Cord No.	D	Cord No.	I	Cord No.	T	Cord No.	D	Cord No.	I	Cord No.	T	Cord No.	D	Cord No.	I	Cord No.	T	Cord No.	D	Cord No.	I	Cord No.	T	Cord No.	D	Cord No.	I	Cord No.	T
32	631	26	1,211	26	1,529	2	745	26	870.9	26	944	19	913	26	71	19	915	18	673.1	30	162.9	18	678.0	9	521.8	30	466.5	9	527.3	34	83.2	30	35.5	34	88.8
5	523	30	900	30	1,271	1	641	30	638.7	31	908	12	188	30	65	12	215	19	590.5	26	87.4	19	593.0	21	287.3	26	254.6	30	482.9	33	20.5	33	19.2	33	39.7
33	487	10	650	10	1,077	31	629	10	494.7	30	889	25	122	34	53	10	129	9	236.5	34	74.8	30	255.4	8	238.9	34	173.2	12	319.4	30	24.0	10	14.8	30	37.9
10	426	34	499	33	918	3	512	17	317.2	2	781	14	101	10	42	25	126	31	130.8	8	55.7	9	238.2	11	226.3	10	165.6	10	307.0	1	0.0	26	10.9	10	14.8
20	418	33	430	32	667	4	494	34	313.0	3	779	10	87	33	39	26	107	30	92.5	10	43.6	31	140.9	12	181.6	23	149.9	21	305.3	2	0.0	34	5.6	26	10.9
25	414	12	364	12	649	28	474	33	312.3	1	774	11	64	12	27	14	102	1	49.8	33	40.9	26	101.9	24	176.2	33	139.8	26	295.3	3	0.0	12	3.9	12	3.9
4	408	31	289	23	628	29	407	23	280.9	10	672	21	57	3	18	30	88	33	40.3	3	40.5	33	81.2	14	168.9	12	137.8	23	283.8	4	0.0	32	3.8	32	3.8
21	385	23	277	20	597	6	355	31	278.8	29	521	8	51	1	14	11	68	3	30.0	17	24.8	34	74.8	25	145.7	3	106.6	8	280.6	5	0.0	8	3.0	8	3.0
28	372	29	241	7	560	8	282	3	267.7	4	497	26	36	17	12	34	65	32	29.7	1	22.0	1	71.8	10	141.4	1	82.6	11	245.1	6	0.0	3	2.6	3	2.6
30	370	17	236	5	547	30	251	12	208.3	28	475	15	31	20	11	21	62	2	26.6	12	17.2	3	70.5	23	133.9	17	66.2	34	183.7	7	0.0	20	2.4	20	2.4
23	351	7	230	29	530	25	243	20	164.8	33	473	20	23	8	7	8	58	5	23.1	29	16.5	8	62.2	19	126.2	8	41.7	24	180.7	8	0.0	23	2.3	23	2.3
6	349	3	207	34	499	24	243	7	137.6	17	461	30	23	31	5.2	33	43	23	16.9	23	15.0	10	59.3	22	64.2	20	41.7	14	175.0	9	0.0	16	1.9	16	1.9
27	345	20	178	25	455	27	236	1	132.7	23	446	23	14	21	5.0	15	35	10	15.7	7	13.7	23	34.9	26	40.7	15	32.3	25	162.2	10	0.0	17	1.7	17	1.7
22	341	8	140	17	453	7	227	8	117.1	8	399	34	12	11	4.0	20	34	26	14.5	13	11.1	23	33.6	15	39.0	7	23.7	33	159.0	11	0.0	7	1.5	7	1.5
7	330	1	140	21	419	20	223	29	113.6	6	395	3	8	13	4	3	26	20	14.2	31	10.1	2	33.6	20	27.3	13	22.3	19	134.2	12	0.0	11	1.5	11	1.5
26	317	24	83	4	413	5	217	13	109.1	20	387	2	6	15	4	1	19	25	12.2	15	10.0	17	33.1	7	25.6	2	20.9	3	115.6	13	0.0	1	1.5	1	1.5
29	288	15	83	27	398	21	181	24	88.2	7	365	1	5	23	4	23	18	7	11.7	20	9.8	29	28.2	33	19.2	29	19.7	1	100.9	14	0.0	6	1.1	6	1.1
12	284	11	61	6	396	32	178	15	86.3	24	331	33	4	25	4	17	12	29	11.7	11	9.5	12	27.2	1	18.3	11	18.8	17	74.1	15	0.0	29	1.1	29	1.1
11	268	13	60	28	375	10	177	11	84.4	12	323	4	0	18	3.8	2	9	24	9.9	2	7.0	7	25.4	30	16.4	21	18.0	15	71.3	16	0.0	25	0.9	25	0.9
8	232	18	55	8	373	14	172	18	55.0	34	313	5	0	32	3.3	31	5.2	11	9.6	18	4.9	5	25.0	34	10.5	25	16.5	20	69.0	17	0.0	15	0.9	15	0.9
24	229	27	53	22	352	23	165	16	41.8	25	282	6	0	7	3.2	13	4.0	21	9.5	25	4.5	20	24.0	3	9.0	31	14.6	22	68.0	18	0.0	31	0.8	31	0.8
14	226	16	47	3	338	33	161	6	40.1	27	263	7	0	2	3.0	18	3.8	27	8.7	6	4.3	11	19.1	5	8.9	16	13.8	7	49.3	19	0.0	13	0.8	13	0.8
17	217	6	47	11	330	15	159	25	38.4	15	245	9	0	6	2.9	32	3.3	17	8.3	32	3.9	15	17.8	6	8.8	18	12.2	2	28.3	20	0.0	21	0.8	21	0.8
15	205	32	36	24	313	9	155	2	35.4	13	243	13	0	16	2.8	7	3.2	15	7.8	27	3.6	25	16.7	17	7.9	6	11.2	13	22.3	21	0.0	5	0.7	5	0.7
3	130	21	34	31	289	22	148	32	26.5	5	236	16	0	19	2.0	6	2.9	8	6.5	21	3.0	13	14.9	18	7.6	32	9.5	29	20.9	22	0.0	18	0.6	18	0.6
13	121	2	31	15	289	17	143	27	26.3	11	221	17	0	29	1.9	16	2.8	28	6.4	24	2.6	21	12.5	2	7.4	19	8.0	6	20.0	23	0.0	19	0.6	19	0.6
1	108	5	24	1	249	11	136	19	23.8	32	204	18	0	5	1.4	29	1.9	4	5.7	19	2.5	24	12.5	4	5.7	14	6.1	18	19.8	24	0.0	9	0.5	9	0.5
16	98	14	22	14	224	13	134	14	20.4	21	200	22	0	9	1.1	5	1.4	22	4.0	5	1.9	27	12.3	29	1.2	9	5.5	31	14.6	25	0.0	2	0.5	2	0.5
18	51	9	21	13	181	12	115	5	19.8	14	192	24	0	14	1.0	9	1.1	13	3.8	9	1.7	28	6.8	16	0.8	5	4.8	16	14.6	26	0.0	24	0.3	24	0.3
19	38	19	20	16	146	26	73	21	18.2	9	172	27	0	22	0.9	22	0.9	14	3.3	22	1.5	4	6.0	32	0.4	24	4.5	5	13.7	27	0.0	27	0.3	27	0.3
2	35	25	14	18	106	16	71	9	16.6	22	164	28	0	24	0.7	24	0.7	6	1.7	14	0.7	6	6.0	13	0.0	27	4.1	32	9.9	28	0.0	14	0.2	14	0.2
9	33	22	11	2	67	18	59	22	16.3	18	114	29	0	27	0.6	27	0.6	12	1.0	16	0.5	22	5.5	27	0.0	22	3.8	4	6.7	29	0.0	28	0.2	28	0.2
31	0	4	4	19	59	19	58	4	2.9	16	113	31	0	4	0.3	4	0.3	34	0.0	28	0.4	14	4.0	28	0.0	4	1.0	27	4.1	31	0.0	22	0.2	22	0.2
34	0	28	3	9	54	34	0	28	1.8	19	81	32	0	28	0.2	28	0.2	16	-11.67	4	0.3	16	-111.1	31	0.0	28	0.6	28	0.6	32	0.0	4	0.1	4	0.1

Table 3 Cost Ratios by Malayan Industry (1960)

Per Capita

Wages and Salaries						Profits						Primary Factors of Production						Imports						Indirect Tax						Subsidies					
Code No.	D	Code No.	I	Code No.	T	Code No.	D	Code No.	I	Code No.	T	Code No.	D	Code No.	I	Code No.	T	Code No.	D	Code No.	I	Code No.	T	Code No.	D	Code No.	I	Code No.	T	Code No.	D	Code No.	I	Code No.	T
29	749	23	386	29	750	28	900	23	601	28	930	2	976	23	1,054	23	1,383	9	697	23	234	9	697	26	419	20	128	26	467	15	0	5	0	13	0
2	408	16	374	23	646	4	795	16	507	4	796	29	948	16	900	26	1,169	13	657	20	70	13	657	5	167	11	81	5	172	13	0	25	0	9	0
25	351	20	194	16	424	1	693	20	407	1	752	28	926	20	730	16	1,026	8	654	10	55	8	655	3	148	23	67	25	149	9	0	3	0	7	0
27	304	11	142	2	408	2	550	6	384	23	669	4	924	11	483	28	987	7	286	25	48	23	470	25	144	26	47	3	148	7	0	20	0	22	0
12	291	26	129	25	403	3	486	11	260	16	584	3	900	6	452	5	982	21	270	26	46	20	339	27	85	16	21	20	128	10	0	27	0	4	0
14	266	5	70	12	313	5	425	5	121	2	551	26	897	26	272	2	977	20	269	6	44	7	287	28	26	6	12	27	85	14	0	11	0	27	0
3	265	6	55	27	304	27	424	18	99	5	547	27	813	5	197	29	952	14	242	5	31	21	271	1	25	1	10	11	81	17	0	28	0	3	0
21	263	25	51	11	290	24	395	26	95	3	486	5	784	18	120	4	925	23	235	1	20	14	243	18	24	18	7	23	67	22	0	29	0	15	0
23	260	10	28	14	266	26	379	1	58	26	475	1	780	25	95	3	900	15	235	28	18	15	235	2	22	12	6	1	35	4	0	12	0	10	0
24	220	28	27	21	266	7	338	25	38	6	449	25	733	1	86	1	866	19	181	18	15	10	201	29	21	5	5	18	31	8	0	24	0	14	0
5	191	12	21	3	265	19	308	28	29	27	424	24	615	28	60	25	828	10	146	24	15	19	183	6	1	25	5	28	29	21	0	19	0	21	0
7	187	24	21	5	261	14	280	12	29	24	418	14	546	10	57	27	814	22	140	16	11	6	144	4	1	24	3	29	23	19	0	21	0	19	0
17	179	1	17	24	241	10	268	10	28	20	416	7	525	12	57	11	751	12	133	19	2	22	141	23	0.2	28	3	2	22	24	0	4	0	24	0
10	170	18	14	26	227	25	237	24	23	11	379	19	471	24	48	20	748	17	126	12	1	25	139	24	0	19	2	16	21	12	0	22	0	12	0
19	162	19	6	20	203	17	194	19	12	7	339	10	439	19	21	24	663	18	108	8	1	12	135	22	0	21	2	6	13	6	0	14	0	29	0
11	148	17	5	10	199	18	184	8	10	19	321	21	425	17	14	6	598	6	100	17	1	17	128	21	0	8	1.58	12	6	16	0	10	0	28	0
4	127	21	3	7	188	29	177	17	8	10	297	12	380	8	13	14	549	24	96	21	1	18	124	20	0	29	1.49	24	3	29	0	7	0	11	0
15	117	8	1.75	17	184	21	162	21	5	18	284	17	373	21	11	7	528	1	95	11	1	1	116	16	0	22	0.81	19	2	28	0	9	0	20	0
9	116	7	1.10	19	169	11	119	22	2	14	282	23	328	22	4	10	496	25	91	7	0.83	24	111	17	0	2	0.66	21	2	18	0	13	0	25	0
26	97	22	1.08	6	135	15	117	14	1.55	25	276	11	267	29	3	19	492	4	62	22	0.38	5	94	16	0	17	0.55	8	1.5	23	0	15	0	5	0
22	87	14	0.85	4	127	12	89	29	1.52	17	202	18	260	14	2.84	12	437	5	56	14	0.34	4	56	15	0	14	0.44	4	1.3	11	0	2	0	26	*0.01
6	79	29	0.73	15	117	16	77	7	1.42	29	179	15	235	7	2.76	21	436	16	40	29	0.16	16	51	14	0	4	0.37	22	0.8	27	0	26	*0.01	8	*0.02
1	63	2	0.32	9	116	8	74	2	0.67	21	167	9	186	2	1.65	17	387	11	19	9	0.11	26	50	13	0	10	0.24	17	0.5	20	0	8	*0.02	17	*0.03
13	57	9	0.28	22	88	9	69	15	0.53	15	118	22	147	9	0.95	18	381	2	10	15	0.08	11	20	12	0	7	0.23	14	0.4	3	0	17	*0.03	23	*0.04
18	51	4	0.18	1	80	23	68	9	0.51	12	118	6	145	4	0.94	15	235	26	3.3	2	0.07	28	18	11	0	3	0.23	10	0.2	25	0	23	*0.04	18	*0.2
16	49	3	0.11	18	65	6	64	4	0.38	8	84	16	126	15	0.65	9	187	29	1.1	4	0.04	2	10	10	0	9	0.15	7	0.2	5	0	1	*0.04	6	*0.39
8	45	15	0.07	13	57	22	60	3	0.23	9	70	8	119	3	0.57	22	151	3		3	0.02	29	1.3	9	0	13	0.12	9	0.1	26	0	18	*0.2	1	*1.64
20	8	13	0.06	8	47	13	57	13	0.12	22	62	13	114	13	0.29	8	133	27		27	0.01	3	0.02	8	0	27	0.12	13	0.1	1	* 160	6	*0.39	16	*3.87
28		27	0.06	28	27	20	9	27	0.12	13	57	20	17	27	0.29	13	114	28		13	0.01	27	0.01	7	0	15	0.05	15	0.05	2	* 427	16	*3.87	2	*4.27

Table 4 Cost Ratios by Indian Industry (1960—61)

Per Capita

Cord No.	Value Added					Imports					
	D	Cord No.	I	Cord No.	T	Cord No.	D	Cord No.	I	Cord No.	T
21	923	1	2,023	01	2,296	26	1,000	23	940	23	1,199
07	897	6	724	15	1,153	24	926	22	511	26	1,000
18	896	20	538	28	1,111	9	606	5	494	24	926
15	847	14	485	18	1,037	5	399	1	412	5	894
28	832	5	374	20	1,022	19	340	15	244	9	696
11	821	16	363	06	1,008	3	311	6	206	6	516
30	817	27	359	02	991	6	310	27	139	22	511
13	811	15	306	21	923	27	281	18	132	3	425
2	742	28	278	11	903	23	258	3	114	27	421
10	736	2	249	13	898	4	256	14	109	1	412
22	532	22	233	07	898	10	180	16	98	4	346
20	484	4	207	30	876	18	56	4	90	19	345
17	373	12	164	22	765	25	46	9	90	15	279
8	371	8	154	10	744	11	41	28	88	18	188
25	348	18	140	16	708	15	35	11	73	10	182
16	344	9	104	14	688	21	27	20	66	14	116
4	335	25	89	27	667	20	25	2	50	11	115
27	308	13	87	05	601	13	16	25	35	16	103
19	292	11	82	04	572	14	7	17	34	20	92
6	284	23	80	08	526	16	4	13	31	28	88
1	273	3	77	25	437	8	1.9	8	22	25	82
12	249	17	59	17	432	12	1.5	12	22	2	50
3	248	30	58	12	413	30	0.9	29	11.1	13	48
5	226	29	30	03	325	17	0.7	30	7.1	17	34
14	203	19	17	19	310	1	0	19	5.1	21	27
23	173	10	7	09	262	2	0	10	2.1	8	24
9	157	7	0.6	23	254	7	0	7	0.3	12	23
29	150	21	0	29	180	22	0	21	0	29	11.1
24	66	24	0	24	66.5	28	0	24	0	30	8.0
26	0	26	0	26	0	29	0	26	0	7	0.3

## Appendix to Table 4.

Industry	Cord No.
Construction, Urban & Industrial	1
Construction, Rural	2
Electrical Equipment	3
Transport Equipment	4
Non-Electrical Equipment	5
Iron & Steel	6
Iron Ore	7
Cement	8
Other Metals	9
Other Minerals	10
Plantations	11
Leather & Leather Products	12
Animal Husbandry	13
Food Industry	14
Food Grains	15
Cotton & Othert Textiles	16
Jute Textiles	17
Other Agriculture	18
Chemical Gertilizers	19
Glass, Wooden & Non-Metalic Mineral Products	20
Forestry Products	21
Motor Transport	22
Petroleum Products	23
Crude Oil	24
Rubber Products	25
Rubber	26
Chemicals	27
Railways	28
Electricity	29
Coal	30

Table 5. The Corelation Coefficients Between Direct Cost Ratios and Intermediate Cost Ratios and Between Direct Cost Ratios and Total Cost Ratios

	Imports		Wages		Profits		Value Added		Custom Duty		Net In Direct Tax		Subsidies	
	R(D.T)	R(D.I)	R(D.T)	R(D.I)	R(D.T)	R(D.I)	R(D.T)	R(D.I)	R(D.T)	R(D.I)	R(D.T)	R(D.I)	R(D.T)	R(D.I)
Australia	0.738	-0.109	0.579	0.699	0.618	-0.149			0.993	-0.040	0.975	0.067		
Malaya	0.973	-0.020	0.799	-0.169	0.741	-0.368	0.609	-0.375			0.950	0.093	0.745	-0.052
India	0.791	-0.004					0.521	-0.158						
Japan	0.921	-0.162	0.831	-0.136	0.823	-0.531	0.516	-0.871			0.983	0.003		
U.K.	0.981	-0.307	0.918	-0.422	0.936	-0.188					0.993	0.022		

Note: D=Direct cost ratios, I=Intermediate cost ratios, T=Total (cumulated) cost ratios

Table 6. Cumulated Cost Ratios by Destination Categories

Per Capita

Cost Categorie	Consumption			Government Expenditure			Private Fixed Capital Formation			Investment in Stocks			Exports of Goods		
	AU	IN	MA	AU	IN	MA	AU	IN	MA	AU	IN	MA	AU	IN	MA
Wages & Salaries	512	} 535	230	141	} 44	61	111	} 451	62	19	} 27	2.6	103	} 169	99.8
Entrepreneurial Income	492		439	77		28	69		60	26		5.9	127		175
Custom Duty	147		0	0.7		0	0.9		0	0.1		0	0.7		0
Indirect Tax 1)	170		41	9		3.6	8		6.7	2		0.2	9		37.7
Subsidies	0		0.1	0		0	0		0	0		0	0		0.2
Imports 2)	171	159	294	22	29	11	26	136	40	6	50	12.9	34	23	90.4
Other Imports	5			2			1			0.1			0.7		
Unspecified Itm.			191			8			25			2.7			43
Sub Total	1,497	694	1,195.1	251.7	73	115.4	215.9	587	195.3	53.2	77	24.3	273.4	192	447.2

Note 1) Indirect tax in Australia is all indirect taxes except custom duty less subsidies, and this in Malaya is all gross indirect tax.

2) This item consists of imports of goods only.

3) AU, IN, MA are Australia, India and Malaya respectively.



Table 7.1 Cumulative Cost Quotas by Destination Categories

%

	Personal Consumption			Government Expenditure			Fixed Capital Formation			Inventory Formation			Exports		
	AU	IN	MA	AU	IN	MA	AU	IN	MA	AU	IN	MA	AU	IN	MA
Wages and Salaries	34.2	77.1	20.8	56	60.3	53.7	51.3	76.5	32	35.7	35	11	37.6	88	22.3
Entrepreneurial Income	32.8		36.7	30.6		24.7	31.9		31	48.8		24.8	46.6		39.3
Imports	11.8	22.9	24.6	9.5		9.5	12.5	23.5	20.5	11.5	65	53.7	12.7	12	20.2
Custom Duty	9.8		0	0.028	39.7		0.041			0.19			0.328		
Net Indirect Tax 1)	11.3		3.4	0.36			0.37		3.5	3.8			0.25		8.5
Subsidies									0.02						
Unspecified items			16			7			12.8						9.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 7.2 Cumulative Cost Quotas by Destination Categories

%

	Personal Consumption		Government Expenditure		Fixed Capital Formation		Inventory Formation		Exports	
	JA 3)	U.K.	JA	U.K.	JA	U.K.	JA	U.K.	JA	U.K.
Wages & Salaries	34.3	44.6	37	54.9	44.9	59.8	24.5	49.4	36.5	51.4
Profits	48.9	28.9	49.5	28.9	42.7	26.8	57.6	25.8	44.1	28.5
Imports	8	14.2	7.3	11.5	6.1	16.1	11.5	20.5	14.4	14.9
Net Indirect Tax	8.7	11.1	6.1	4.3	4.5	2.9	6.4	4.06	0.5	4.8
Adjustment 2)	0.1	-10.8	0.4	-9.6	1.8	-5.6	0	0.24	4.5	0.4
Total	100	100	100	100	100	100	100	100	100	100

Note: 1) 'Net indirect tax' in Australia is all indirect taxes except custom duty less subsidies and this in Malaya is gross indirect tax.

2) 'Adjustment, in U.K. consists of final buyers' resale.

3) JA indicates Japan.

## INTERNATIONAL LIQUIDITY CONTROVERSY IN JAPAN (1)

Masahiro FUJITA

### I

With the appearance of *the Triffin plan*, the controversy of international liquidity and the reform of the international monetary system in Japan is getting stronger day by day. Here we define the international liquidity conception, as follows: It depends upon how to liquidate international debt and credit as derived from the international payment relation and international trade, the gold exchange in place of the gold. And, another concept implies the liquidity of gold of the dollar exchange itself. Therefore, the above-mentioned two definitions must be distinguished more accurately. In other words, we know the large and clear difference between liquidity of gold and of the dollar, for dollar claim we consider international liquidity as containing all the official reserves for the quantity of the world trade and credit facilities from private and official financial institutions. From a broad definition, international liquidity implies credits from the IMF and funds or loans from the government and central bank, added to the general private creditability of official and private financial institutions, namely, it implies the international financial strength.

Then, it is necessary for us to look into the various reforming proposal for the international monetary system in Japan. In this work, we would like to introduce faithfully and examine *the Matsumura plan*, *the Horie proposal*, and finally *the Miyata plan*. The examination of many other famous plans will be taken up at a future date. As we are already familiar with *the Kojima plan* (*lent currency proposal*) and *the plan of the Japan Economic Research Institute* and others, we should like to study the above-mentioned three plans in this paper.

### II

Professor Zentara Matsumura proposed the following plan for the reform of the international monetary system, with the intention of helping to advance the present arrangements.

(1) Gold subscription to the IMF is to be strictly observed, and the Fund's investment is to be stopped immediately. Specifically, Article III,

Section 4(a), which provides that 25 per cent of a quota increase be paid in gold, should be rigorously adhered to, as is being demanded by the French and the Dutch. The extension of gold tranche rights without gold payment or with means other than payment in gold—e. g. in callable gold certificates, as suggested by *the Ossola Report*, should be categorically ruled out. Should gold certificates be issued in exceptional cases, they must be redeemed by gold within five years, i. e. before the next quinquennial increase of quotas comes around. However, the concession in Article III that a member whose monetary reserves are less than the new quota may reduce the proportion of the increase to be paid in gold, should be maintained. The majority of developing countries, taking advantage of such a relaxation, could be exempted from paying gold, sometimes to the maximum extent of zero payment. For advanced members, on the contrary, who are likely to claim greater voting rights by acquiring larger quotas, the entire payment of gold should be made obligatory.

Otherwise they might make exaggerated claims for increasing their own quotas. In short, full-fledged members should contribute to the concentration of gold in the IMF in proportion to their voting power in the Fund. In this way we can enforce and honour, indirectly through the IMF, the rule of gold. Because we believe that, as General de Gaulle proclaimed, “doubtless no one would think of dictating to any country how it should manage its domestic affairs, except through the supreme law, the golden rule”.

Now that the outcome of gold subscription to the Fund, the gold tranche, may be included in the reserves of members, being automatically available, payment of gold to the Fund does not mean any material reduction in the member's liquidity. The gold tranche thus acquired might be compared with the initial compulsory deposit proposed by *the Triffin plan*. It is not convertible into gold but is as fully usable as gold in international transactions. If non-reserve currency members turn their dollars into gold at the U.S. Treasury in order to meet the need of their gold subscriptions, this would contribute to the gold concentration in the Fund far more to drastically than the Triffinian method. For under *the Triffin plan*, the reformed IMF would start off with compulsory deposits of stipulated amounts (not convertible into gold but as fully available as gold for international transactions) and, in the meantime, if the dollars were paid in, they would be gradually liquidated at the rate of 5 per cent a year. It is of great interest that the Fund's Articles of Agreement contain such drastic items which would concentrate gold in the Fund, shipping over the two steps proposed by Professor Triffin. Any reform plan of the world's money, if it deserves universal acceptability, must contain a scheme that

would ultimately lead to gold concentration in a central organization automatically through the working of its own mechanism.

*The Matsumura plan* also shows the next proposal. It states that the Fund's gold investment in reserve currency countries should be suspended immediately. Unquestionably, the gold subscription rule in the general quota increase, if it is adhered to, would inevitably cause a severe drain on the two reserve currency countries, because countries holding dollars or sterling would convert their holdings into gold to meet the subscription obligation to the Fund. In order to soften such an impact, the Fund is making a practice of selling gold to reserve countries. In the coming quota increase, the Fund is again going to deposit gold in both reserve countries up to \$350 million, of which \$250 million will be for the United States and \$100 million for the United Kingdom. Americans support such a gold investment as an indispensable measure to defend the gold reserves of key currencies. But the key currency system should not be identified with the IMF. If we recall that the IMF emerged as an antithesis to the key currency approach propounded by Professor Jhon H. Williams, we suspect that gold investment for strengthening the key currency system might run counter to the spirit of the Bretton Woods Agreement. Furthermore, now that the dollar can hardly be regarded as a scarce currency in the Fund, the Fund's method of acquiring abundant dollars with the sale of gold, might be interpreted as a violation of Section 2 of Article VII which provides for the sale of gold by the Fund only when it is required to replenish the Fund's holdings of scarce currencies.

Since the transfer of U. S. gold to the Fund through gold payment by other countries reinforces the lending capacity of the Fund, the United States should use the Fund on a larger scale, instead of relying solely on the gold in her own possession. The U. S. automatic right to borrow from the Fund has been much improved, because her gold tranche has expanded in proportion to the repeated increase of her quota. But the more the Fund sells gold to reserve countries, the less reliable is the gold value guarantee given by the Fund to the GAB, and the more difficult it becomes for the Fund to cater to usable currencies available for the defence of the key currencies.

Expressed differently, for America to buy gold from the Fund is, as a Japanese saying goes, "to strangle one's neck with one's own hands".

Secondly, Dr. Matsumura states (2) the creation of a New Reserve Assets out of GAB. As abovementioned, when the GAB is activated the Fund issues to a lender, on request, non-negotiable instruments showing its indebtedness. In order to bring up new reserve assets out of these notes, we propose to make

one simple, though important modification, following the suggestion by Professor A.C.L. Day "to provide that the new notes should be repayable on demand instead of simply when a holder has a payment deficit". In present circumstances, the holders of notes would be *Western Continental* countries which have no need to demand repayment before maturity due to balance-of-payments reasons. Since under the present arrangements, a lender country is prohibited from transferring all parts of its claim to repayment without the Fund's approval, our step is to modify this clause and give the notes a complete transferability among the participants of the GAB. This would make the holders regard their notes as reserves. The transferable notes could then meet the liquidity requirements among the participating advanced countries. In order to make the notes so attractive to the holder (virtually gold preference continentals) that they would hold them as long as possible, we must strengthen the gold clause on the notes by preventing gold diversion from the Fund, as mentioned earlier.

The maximum ability of GAB in accommodating needed currencies is only \$3.2 billion, after the coming sound of quota increases, the quota of the United States will swell to \$5.160 million and her potential borrowing right will expand to \$6,450 million (125 per cent of her quota). Unquestionably the Fund could scarcely accommodate enough continental currencies to meet the demand. In addition to this, we must take into account the borrowing potential of the United Kingdom amounting to \$2.965 million, which corresponds to her revamped quota of \$2.444 million. It is clear that the Fund could not provide, through normal channels, usable currencies to meet the demand of both key countries. As the usable currencies would consist chiefly of *Western Continental* currencies, GAB quotas for Germany, France, Italy, the Netherlands, Belgium and Switzerland should be doubled at least, leaving those of other participants unaltered.

Professor Day recommends as a next step that the Fund (or its *Reserve Stabilization Account*) accept further deposits by members of gold dollars, or sterling in exchange for these Fund notes.

However, we suspect that his step is years ahead of its time. Only after having completed the liquidation of the past (discussed below) should the Fund embark on a plan of accepting gold and

New Quotas	
(equivalent in million U.S. dollars)	
Germany	2.000
France	1.100
Italy	1.100
Netherlands	400
Belgium	300
Switzerland	400
	5.300
unaltered:	
UK	1.000
US	2.000
Canada	200
Sweden	100
Japan	250

other deposits from members in exchange for their notes.

The time is not ripe yet for the Fund's notes to blossom out into full-fledged reserve assets. Nor are we so short of liquidity as to have to supplement it with new reserve assets by ascertaining then rudimentary form in international monetary cooperation developing among the advanced nations. *The Ossola Report* suggests that the United States (likewise the United Kingdom) draw the currencies of dollar holders—chiefly *Western Continental* currencies—from the Fund and use them to buy back the dollars from the holders.

Finally (3), *reinforcement of liquidity in general* through normal IMF channels.

The Fund's holding of dollars has been on the increase since 1959. Although the leading *European* countries had achieved a de facto convertibility at the end of 1958, it was in February 1961 that they accepted the provisions of Article VIII and acquired de jure convertibility for their currencies.

The IMF serves to kill two birds with one stone: first an outlet is provided for the dollar glut in the Fund, and secondly underdeveloped countries are helped over critical payments difficulties. In giving financial assistance, the Fund would have to be concerned with the leakage of the dollar. Untied dollars to be provided by the Fund would have a larger leakage and in turn have an impact on the American gold stock.

However, if the leakage should increase the *Western Continental* dollar reserves.

There is every prospect that in the near future the Fund's financial assistance will and should be increasingly made in dollars. When the dollars are drawn, the United States will experience an improvement in her Fund position and this will automatically accelerate the restoration of her gold tranche right. It will also ensure that member countries overtime temporary payments problems. In connection with aid to developing countries, we must stress the fact that the traditional method of financing which has been pursued by the Fund, is most suitable in distributing liquidity to the world. Since drawing from the Fund is conditional beyond the gold tranche, it can combine the liquidity approach with the adjustment process.

### III

The former president of the Bank of Tokyo, Dr. Shigeo Horie, a great expert of international monetary problem in Japan, proposed the following remarkable plan.

First of all, Dr. Horie divided into the following three groups the various arguments for reform of the IMF organization :

1. The current question can be solved within the framework of the IMF Agreement, and even if an attempt be made to reform it, it should be done slowly and progressively. Such a view has been called, previously, an argument for *conservative* reform.

2. Another view advocates a progressive and important reform of the present Agreement. This is named an argument for *positive* reform.

3. It is necessary to make a fundamental re-examination of the present Agreement and reform the IMF itself. This may be labelled an argument for *fundamental* reform. We, at once, may point out *the Triffin plan* as a typical plan. In addition to these proposals, there was another for return to the gold standard system advocated by Jacques Rueff, economic adviser to President de Gaulle, and Professor Michael Heilperin.<sup>(10)</sup> In short, they point to the elements of instability inherent in the present gold exchange standard system,<sup>(11)</sup> which has national currencies such as the dollar and the pound sterling as international currencies, and insist upon its abolition and upon a return to the complete gold standard system of former days. However, they put forward an concrete proposals for dealing with the liquidity shortage to be expected from a return to the gold standard system. Here, we merely mention the existence of this view-point, without, however, going into details.

Moreover, there is another measure which is capable of solving the problem without resorting to a reinforcement or reform of the IMF system as above-mentioned. It is to increase the price of gold as consistently advocated by Sir Roy Harrod. This proposal is, no doubt, very attractive to those who are pessimistic about the future of international liquidity.<sup>(12)</sup> But, we cannot agree with Horie's estimation of *the Harrod plan*, for increasing the price of gold, regarding the means of payment as the only important function, which is nothing but a fickle nominalistic logic which neglects the function of measuring the value of gold.

Therefore, this function of gold is the most essential for us. Now, we shall introduce the following various proposals from Dr. Horie's criterion ;

1. *Conservative reform*—*Per Jacobsson plan, E. M. Bernstein plan.* As for *the Bernstein proposal*, Professor R. Triffin criticizes it as follow :<sup>(13)</sup><sup>(14)</sup>

① The proposal is simply a half way reforming plan designed to correct short term disequilibrium. It is therefore not only useless as a long-term solution of the question of international liquidity, but tends also to evade the essential point.

② The IMF in mobilizing funds from members, has to follow complicated procedures, such as entering into individual negotiations and obtaining the approval of the member's parliament upon the uncertain basis of its future balance of payments with the result that the IMF wouldn't in practice enjoy much mobility. It is wiser to simplify the present. Agreement as a whole and thereby avoid the trouble of individual amendments and periodical negotiations.

③ If the IMF were to issue debentures for general purposes, it would be placed in an irrational situation of possessing a large amount of local currencies which would not actually be used for international payment.

But, suggests that limits of borrowings from leading countries should be as follows: \$3 billion from the United States, \$1.5 billion from Britain, and \$3.5 billion collectively from Belgium, Canada, France, Italy, Japan, the Netherlands and West Germany, the total amounting to 8 billion.

The second part of *the Bernstein plan* concerns the promotion of positive policies for lending which is the original function.

Then, Bernstein proposes the institution of a "*Reserve Settlement Account*" to deal with international monetary circumstances. Although this proposal met some strong opposition from France. The Netherlands and Belgium, it was nevertheless finally approved, in principle, and the Executive Directors were requested to formulate a definite plan by the end of 1961. As this demonstrates, the current tendency is to achieve the desired objective by a looser interpretation of the provisions of the Agreement, and to alter the organization as little as possible.

2. *Progressive plan*—*Balogh plan*, *Maxwell Stamp plan*. *Meade-Scammell proposal*.

On Dr. Horie's analysis,<sup>(17)</sup> the best means for solving the reserve problem is a mixed theory from the various proposals. On this topic Balogh recommends an expansion of the conceptions of Bretton Woods. That is, the solution, for the reasons mentioned above, should combine in one organic measure a "liquidity approach" (capacity for bringing about liquidity) and an "equilibrium approach" (minimizing the need for liquidity). It would be sufficient to enlarge the functions of the "Fund" and "Bank" of the present Bretton Woods Agreements and require them to cooperate with each other. Unfortunately, however, there have been no instances of these organizations having cooperated to overcome those deficits in leading countries brought about by recessions.

First of all, a reform of some of some of the basic principles of the IMF



Agreement is necessary, giving it the character of a central bank, as follows: Initially, it is necessary to change the character of members' subscriptions because, as the quotas under the present Agreement must be paid in gold to the extent of 25 per cent, this results in a decrease in the visible reserves of members. Even if a stand-by-credit is granted, this does not result in an increase in their reserves. In short, there is a defect in the relations governing subscriptions to the IMF, borrowings and repayments and the levels of the reserves of the members concerned. Could not this defect be eliminated by the following methods?

- (a) To treat that part of the quota which is payable in gold (gold tranche) as part of the reserves of the member concerned. This is the first step.
- (b) The second is to increase the gold tranche without additional gold payments.
- (c) And lastly, to treat all deposits with the IMF as part of a member's reserves.

Next, the international central bank mentioned above should not only make ordinary loans, but should also effect positive open market operations so as to add to liquidity. Detailed regulations would of course be necessary to prevent the abuse of such powers. In order to make it easier for creditor countries to accept this proposal;

- ① Voting power should be increased in step with increases in deposits. The qualified majority should also be raised in keeping with the degree of liquidity created, through which the raising of liquidity as a whole would naturally be controlled (because a certain number of votes are required for this).
- ② Furthermore, it would be better for loans by the central bank to be limited by a formula of some kind (for example, by a certain ratio to the rate of economic growth or to external payments).

Balogh further proposes that the IMF set up an "International Development Fund" which will allow it automatically to direct the increase in its permanent credit balances toward long-term investments in less-advanced countries, these investments having some connection with the economic activities or inactivities of advanced countries in order to reinforce the operations of the present World Bank. According to Dr. Horie, by so doing, the IMF could be expected to become an *International Central Bank* in the real sense of the term, and in addition the necessity to increase international liquidity would be lessened. As the foregoing is a warm outline, a number of technical points have not been elaborated. The first step involves the incorporation of the IMF's gold tranche into member's official reserves, an idea also to be found in the

*White plan.* It goes without saying that the present rule that drawing on the gold tranche is entirely automatic should be firmly established.

As a second step, this gold tranche, that can be freely drawn upon, should be raised by members without additional gold payments. Increasing external payment facilities with no backing of gold in this way could be accomplished gradually.

So, we would like to omit the following *Stamp plan* and *Meade-Scammell proposal* (contains *F. A. Lutz Plan*).

The fixed rate system is a kind of international control and it should not be overlooked. All central banks, therefore, even if they have transferred to flexible or floating rates and possess stabilization funds, would have to agree secretly, in order to be realistic, on the conditions for intervention in exchange markets; otherwise there would be competition between the various stabilization operations. Thus a system of floating rates without international control is an adventure without precedent, and today, when international politics are so disturbed, it is impossible to think that this could succeed. Even if such stabilization agreements were to be concluded and were somehow successful, they would only serve to correct short-term disequilibrium, and would never constitute a fundamental solution of the question of international liquidity itself.

3. *Fundamental reform—Triffin plan.* The *Triffin plan* is the most fundamental plan, and shows the final situation of the international monetary system, so we, in this work, will not criticize in detail on account of the various Anti-Triffin proposals.

According to Dr. Horie, the first criticism of the *Triffin Plan* is the estimation of the shortage of international liquidity. Triffin made a simple, arithmetical calculation of the amount of reserves required as against the total value of world imports, and this invited criticism. This, however, was but his own analysis designed to obtain a general view, and reached in full awareness of the drawbacks of the quantity theory of money. Moreover, this method was employed in 1958 by the IMF itself in its noted report on "*international reserves and liquidity*". In the *Triffin proposal*, the increase of international reserves has hitherto been financed (1) by an increase in the dollar and sterling debts of the countries concerned; (2) by the concentration of gold in the amounts of central banks; (3) by the change of gold parity; and (4) by sales of gold on the market by the Soviet Union. After the war, however, the greater part of the reserves (two-thirds in the last ten years) has been financed by (1). The world has now reached the stage at which any increase in dollar

and sterling balances is not possible. Unless attempts are made to eliminate the built-in de-stabilizer which this represents, there may be permanent instability.

Second, the creation of a new international currency, which is the main object of the plan, ensures its conversion into gold, a feature which has aroused adverse comment. As is known, the instability of the current key-currency system cannot be removed immediately, for it depends upon the skill with which international credit is controlled, and if the creation of credit through a new currency results in a surplus of liquidity, then confidence in the new currency itself would be shaken and a general flight to gold would become a possibility. In reply to the O. Altman criticism, Triffin counters that his plan can never weaken the control of the flow of gold.

Lastly, Dr. Horie shows *the Harrod plan*, and regards this as another measure of attaining international liquidity. *The Harrod plan* is too well-known already as the raising of the price of gold.

As the result of the above-mentioned analysis, Dr. Horie shows his own original conclusion as follows ;

Whether a fundamental reform of the current system is necessary depends, after all, upon the prospects for the future of international liquidity. If we thoroughly examine the subject of international means of payment, we shall find that there are three facets. The first concerns liquidity ; the second has to do with the centre of international finance ; the third, which is related to the above, regards the control of gold.

Firstly, the well-known Triffin opinion is based upon his pessimistic judgement of the future. On the other hand, those who take the opposite view ; the optimists, consider that it is possible to cope with the situation by strengthening the key currencies, and that there is ample room for this. However, with regard to future liquidity, a careful examination must be made free of all traces of careless optimism. The question of aid to emerging countries must also be taken into consideration, for it is highly questionable whether even the combined total strength of the key currencies will be sufficient to promote rapid growth in a balanced world economy. In other words, the speed of the economic growth of key countries must not be over-estimated. Moreover, in practice, the extent of such a currency in the future is doubtful.

Secondly, the question is limited to the nature of the international financial centre. It is further contended that centres in the plural rather than in the singular are to be preferred. The reason given for this, for example, by Bernstein, is that if only one currency is used by all countries as a reserve,

gold is the only means of flight from that currency, but if two currencies are utilized for this purpose, then the flight from one is merely a flight to the other. In consequence, the only problem is for these two centres to take measures to strengthen each other. Such being the case, is it not natural, in the light of past performances, for us to desire that there should be only one genuine centre acting as a strong international organization? Therefore, the centre must be strong and the only one.

Thirdly, the question of an international currency system must be considered in the light of the need to control gold, because it is impossible to disregard the existence of gold as a basic medium for international settlement. In brief, we should not neglect the control of currency internationally, any more than we should nationally. And any international control of currency should, in practice, be through an international organization. If we ponder over the questions of liquidity, control of gold and the character of an international financial centre which underlie the international currency system, we cannot but feel the keen necessity of a fundamental reform of the current IMF system, not only for a short term but also for a long-term benefit of the international monetary organization.

But if there is no such possibility and the separate international currency systems of the two groups remain, the question then will be how to combine these two systems into a one global. These theories of Dr. Horie may be the most popular acceptable opinion, and it may also in other words, reflect naturally our international position as being on the familiar Anglo-American side.

#### IV

Professor Kiyozo Miyata proposed the *Gradual Increase of the Price of Gold* by 2% from year to year until 1964.

Dr. Miyata points out the solution for the present international liquidity difficulties as follows:

The most effective remedy for the shortage of international liquidity is the increase of the world gold reserves. This can be effected by three different, but not necessarily mutually exclusive, approaches;

- (a) to increase the world gold production,
- (b) to increase the ratio of gold used for monetary reserve purposes to annual production as well as to the total stock of gold—i. e., the diminution of gold hoarding—and (c) to increase the price of gold—i. e., an upward revaluation of gold.

According to Professor Miyata, the problem of the so-called shortage of

international liquidity has, broadly speaking, two different aspects. One is the considerable shortage or the low level of gold liquidity at present, which has resulted from the fact that the rates of the annual increase of gold reserves through gold production has been small compared with those of the growth of world trade over the past several decades. The other, and more important, aspect of the problem is the prospective gradual decline of the ratio of world gold reserves to world trade in the future.

The first proposal below is concerned with the former aspect of the problem, and the second is concerned with the latter. *The Miyata proposal* attempts to check speculative hoarding of gold and also to preclude the probable trend of declining international liquidity due to a shortage of gold production relative to a growth of world trade in the future.

The governments should announce in advance that the official selling and buying prices of gold be raised periodically at regular intervals, and should specify the dates of such revaluations and the size in percentages.

The size of the increase of gold price should not be more than the cost of hoarding gold, which includes the costs necessary to exchange currency to and from gold. Suppose that the price of gold is raised periodically at the annual rate of 2%. It could be raised by 2% a year in one step, in two steps or in four steps.

The rate at which the price of gold is increased must be determined with due consideration to monetary authorities' handling charges on sales and purchases of gold.

The annual rate of revaluation of gold should be reasonably low—low enough to discourage speculators from borrowing money on interest to hoard gold for profitable sales at later dates. A raise of 2% a year is recommended here.

The effects of *the Miyata proposal* result in the following four points :

When a 2% a year successive revaluation of gold is carried out without being accompanied by the above-mentioned once-for-all major revaluation of gold, it would produce the following effects :

1. The speculators who have purchased gold in hopes that the price of gold would be raised by a substantial margin in the near future would be disappointed and sell their hoarded gold.

2. As a direct effect of such a successive minor revaluation, the dollar value of world gold reserves would be increased from \$41,430 million to \$42,258 million by 2% after the first gold revaluation, and the ratio of gold reserves to world trade (value) would increase slightly from 31.5% to 32.1%.

3. If the price elasticity of gold production is assumed to be 0.5%, the volume of annual gold production would increase by 1%, and its dollar price would increase by 2%. As a result of both sides the dollar price of the annual gold production would increase by 3.02% from \$1,304 million to \$1,343 million. If 60% of the annual gold production goes into the monetary reserves, it would contribute to the growth of world gold reserves by raising its annual growth rate from 1.89% to 2.13%.

4. Through these two effects, thus, the world gold reserves would increase at the annual rate of 4.13% (= 2% + 2.13%) which is more than double as compared with the current rate of 1.89%. Such an estimated growth rate of the world gold reserves would quite equal is the estimated growth rate of world trade in the future.

Moreover, when the 2% a year successive minor revaluation of gold is carried out together with the 42.85% once-for-all major revaluation of gold, the effects would be as follows: the world gold reserves would be raised from \$41,430 million to \$60,368 million and the ratio of the gold reserves to the world trade would be increased by 14%, and annual growth rate of gold reserves would be much more than 4.31%.

Thus, *the Miyata plan* has a different and remarkable feature from *the Harrod plan* and *Machlup plan*. However, we do not understand *the Miyata plan* completely. For instance, we wonder as to the reason why the conception of international liquidity and an adequate growth of the international gold liquidity in the future are original.

Furthermore, the plan to revalue gold periodically in succession by 2% a year is recommended here as a measure to make up for a possible declining trend of international liquidity in the future. Nevertheless, the function of the measure of the value of gold must be recognized again.

As we agree with the idea that the ultimate direction for the development of the international monetary system will be found in strengthening the international management of the reserves and facilities gradually we support the proposal by the *Group of Ten* and *the Hague Conference* of 1966, and encourage along this line, any constructive opinions of all circles concerned.

In short, we support mostly *the Matsumura proposal*.

#### FOOT-NOTE:

(1) Robert Triffin, *Gold and the Dollar Crisis*, 1960.

(2) Zentaro Matsumura, *An Evolutionary Plan for World Monetary Reform*, *The Banker*, Sept. 1966.

(3) Shigeo Horie, *The International Monetary Fund, retrospect and prospect*, 1964.

(4) Kiyozo Miyata, *A Proposal to Increase the Price of Gold*, *Banking* (Osaka), No. 176, 1962.

- (5) Kiyoshi Kojima, A Proposal for Increasing International Liquidity, *Oriental Economist*, (Tokyo), 32, pp. 549-51, Aug. 1964.  
—, A Revision of the Kojima plan for untying aid, *Oriental Economist* (Tokyo), 32, p. 675, Oct. 1964.
- (6) Japan Economic Research Institute, Proposals on the Subject of International Liquidity, 1964.
- (7) Jhon H. Williams, Postwar Monetary Plans and other Essays, 1947.
- (8) A. C. Day, Reforming the International Monetary System, *Westminster Bank Review*, Aug. 1964, pp. 2-12.
- (9) Rinaldo Ossola, On the Creation of New Reserve Assets: the Report of the Study Group of Ten, *Banca Nazionale del Lavoro*, Quarterly Review, (Rome), Sept. 1965.
- (10) Jacque Rueff, Un Danger pour L'Occident: Le Gold-Exchange Standard, *Le Monde*, juin, 1961.
- (11) Michael A. Heilperin, The Case for Going Back to Gold, *the Fortune*, Sept., 1962.
- (12) Sir Roy Harrod, the Dollar Problem and the Gold Question (the Dollar in Crisis, ed. S. E. Harris), 1961.  
—, Reforming the World Money, 1966.
- (13) Per Jacobsson, The Two Functions of an International Monetary Standard: Stability and Liquidity (World Monetary Reform, ed. Grubel), 1963.
- (14) E. M. Bernstein, The Linking of Gold and Foreign Exchange as Monetary Reserves, 1963.  
—, Pläne für eine Reform des Internationalen Währungsfonds (Wirtschaftsberichte der Creditanstalt Bankverein, Vienna, 13, Jahrg, Sept. 1961).
- (15) T. Balogh, International Reserves and Liquidity, *Economic Journal*, June, 1960.
- (16) Maxwell Stamp, the Stamp plan—1962 version, *Moorgate and Wall Street* (London), Autumn 1962.  
—, the Reform of international monetary system, *Moorgate and Wall Street* (London), Summer 1965.
- (17) J. E. Meade, The International monetary mechanism, *Three Bank Review*, No. 63, Sept. 1964.
- (18) F. A. Lutz, the Problem of International Liquidity and Multiple-Currency and Standard, *Essays in International Finance*, No. 41, 1963.  
—, Die Diskussion über die internationale Währungsordnung, in *Ordo*, Jahrbuch für die Ordnung von Wirtschaft und Gesellschaft, 1965.

## INVESTMENT CRITERION FOR MAXIMIZING THE RATE OF CAPITAL ACCUMULATION

Hikoji KATANO

1. Professor P. C. Mahalanobis [1, 2] has developed his income growth theory for India's Second Five-Year Plan. At the same time, Professor E. D. Domar [1] has independently developed the same kind of income growth theory on a line developed by Russian economist, Mr. Fel'doman. We call this line of theory the investment priority theory to the capital goods industry. This is a rather long title for a theorem. However, it shows quite clearly the characteristics of this theorem—that the larger the investment allocation ratio to the capital goods industry the larger the growth rate of national income, especially in the long-run. This theory is very attractive and suggestive for the planning authority of a developing country. But the most important problem for the planning authority is how to fix the allocation ratio. Professor Mahalanobis did not suggest any theoretical criterion. At the Second International Conference on Operational Research, he and Professor M. Mukherjee [3] reported that the allocation ratio has rather *operational* characteristics. They also said that this means that the allocation ratio depends on the planning authority's choice; that the allocation ratio is fixed at a certain level to be feasible under a given condition. However, such a consideration is rather of the actual application. Theoretically, we must take some investment criterion to fix the allocation ratio at an optimal level.

2. Professor Domar has suggested a few criteria to fix the allocation ratio. For the purpose, he assumes a limited planning horizon, for example of 10 or 15 years. His criterion is to fix the allocation ratio so as to maximize the accumulated amount of consumption within this limited time horizon or to maximize the consumption level for the last year of planning.

3. Professor M. Dobb [1] has recently pointed out that the choice of an allocation ratio, in the framework of the Mahalanobis-Domar model, is closely related to the level of the real wage rate. In this model, production coefficients are all fixed. Due to this assumption, the larger the investment allocation ratio to capital goods industry, the smaller the real wage rate. This means that the allocation ratio can be increased only by a sacrifice in the real wage rate. However, the planning authority cannot force the reduction of the real wage



rate so much under the present situation of a developing country. Thus Professor Dobb says that the allocation ratio must be chosen within a very limited region.

4. In this paper, let us introduce an assumption of variable production coefficients. This assumption makes the allocation ratio variable for a constant level of the real wage rate. But, in this case, we have to note that a change in the technical level is accompanied by change in the allocation ratio. In addition to this, we can observe the possibility of keeping the allocation ratio so as to maximize the rate of capital accumulation.

5. Two industries are assumed in our proposed model; a capital goods industry (industry 1) and a consumption goods industry (industry 2). Each product is produced by a certain input-combination of capital and labour.

Both industries have their own capital stocks which have been accumulated in the past. Each industry makes use of the capital stock so as to maximize its rate of return of capital. This means that the employment level in each industry is determined by the level of capital stock. There is no guarantee for full employment in the economy as a whole. Employment is measured in terms of labour-hour, not in the number of workers. And we assume that a worker does not always work according to the standard working hour but by less than that. In this way, we can introduce a disguised unemployment into our model. Income to capital is fully saved for new investments, and income to labour is spent only for consumption. Foreign trade is not considered.

6. We assume our production function in a homogeneous form of the first degree. Moreover, we follow it in the form of the Cobb-Douglas function.

Our model becomes as follows :

$$\begin{array}{l}
 X_1 = K_1^\alpha L_1^{1-\alpha} \\
 X_2 = K_2^\beta L_2^{1-\beta}
 \end{array}
 \left. \vphantom{\begin{array}{l} X_1 \\ X_2 \end{array}} \right\} \text{production function}$$
  

$$\begin{array}{l}
 r_1 = \alpha K_1^{\alpha-1} L_1^{1-\alpha} \\
 pr_2 = \beta K_2^{\beta-1} L_2^{1-\beta} \\
 R = p(1-\alpha)K_1^\alpha L_1^{-\alpha} \\
 R = (1-\beta)K_2^\beta L_2^{-\beta}
 \end{array}
 \left. \vphantom{\begin{array}{l} r_1 \\ pr_2 \\ R \\ R \end{array}} \right\} \text{optimal utilization of capital}$$
  

$$\begin{array}{l}
 K = K_1 + K_2 \\
 L = L_1 + L_2 \\
 X_1 = r_1 K_1 + r_2 K_2
 \end{array}
 \left. \vphantom{\begin{array}{l} K \\ L \\ X_1 \end{array}} \right\} \begin{array}{l} \text{allocation of capital stock} \\ \text{employment} \\ \text{investment-saving} \end{array}$$

where

- $X_i$  = output level in industry  $i$ ,  
 $K_i$  = capital stock allocated to industry  $i$ ,  
 $L_i$  = labour hour employed in industry  $i$ ,  
 $r_i$  = rate of return of capital in industry  $i$ ,  
 $p$  = price of capital goods measured by consumption goods,  
 $R$  = real wage rate per one unit of labour hour in terms  
of consumption goods,  
 $K$  = total stock of capital,  
 $L$  = total employment measured by labour hour,  
 $\alpha$  and  $\beta$  parameters.

For simplicity, we can revise the above model as follows :

- (1)  $x_1 = k_1^\alpha$   
(2)  $x_2 = k_2^\beta$   
(3)  $r_1 = \alpha k_1^{\alpha-1}$   
(4)  $pr_2 = \beta k_2^{\beta-1}$   
(5)  $R = p(1-\alpha)k_1^\alpha$   
(6)  $R = (1-\beta)k_2^\beta$   
(7)  $L_1 k_1 = K_1$   
(8)  $L_2 k_2 = K_2$   
(9)  $K = K_1 + K_2$   
(10)  $L = L_1 + L_2$   
(11)  $x_1 L_1 = r_1 K_1 + r_2 K_2$

where  $x_i = X_i / L_i$  ( $i=1, 2$ ).

7. In this system, we can uniquely determine  $[x_1, x_2, k_1, k_2, L_1, L_2, L, K, r_1, r_2, p]$  for given  $[K_1, K_2, R]$ .

Out of all these unknowns, we partly determine the following :

$$(12) \quad k_1 = \left[ \frac{\lambda(1-\beta)}{\beta(1-\lambda)} \right] \left[ \frac{R}{1-\beta} \right]^{\frac{1}{\beta}}$$

$$(13) \quad k_2 = \left[ \frac{R}{1-\beta} \right]^{\frac{1}{\beta}}$$

$$(14) \quad r_1 = \alpha \left[ \frac{\lambda(1-\beta)}{\beta(1-\lambda)} \right]^{\alpha-1} \left[ \frac{R}{1-\beta} \right]^{\frac{\alpha-1}{\beta}}$$

$$(15) \quad r_2 = \alpha \left[ \frac{\lambda(1-\alpha)}{\alpha(1-\lambda)} \right] \left[ \frac{\lambda(1-\beta)}{\beta(1-\lambda)} \right]^{\alpha-1} \left[ \frac{R}{1-\beta} \right]^{\frac{\alpha-1}{\beta}}$$

$$(16) \quad p = \left[ \frac{\beta(1-\lambda)}{\lambda(1-\beta)} \right]^{\alpha} \left[ \frac{R}{1-\alpha} \right] \left[ \frac{1-\beta}{R} \right]^{\frac{\alpha}{\beta}}$$

where  $\lambda = \frac{K_1}{K_1 + K_2}$  : the capital allocation ratio to a capital goods industry.

Other unknowns are easily reduced from these results.

8. Rate of capital accumulation in each industry is

$$(17) \quad g_1 = \frac{\Delta K_1}{K_1} = \frac{\phi \Delta K}{K} \frac{K}{K_1} = \phi g \lambda^{-1}$$

$$(18) \quad g_2 = \frac{\Delta K_2}{K_2} = \frac{(1-\phi) \Delta K}{K} \frac{K}{K_2} = (1-\phi) g (1-\lambda)^{-1}$$

where

$\phi = \frac{\Delta K_1}{\Delta K_1 + \Delta K_2}$  : the investment allocation ratio to a capital goods industry.

$g = \frac{\Delta K_1 + \Delta K_2}{K_1 + K_2}$  : rate of capital accumulation of the economy as a whole.

As we have assumed that the full amount of income to capital is saved for new investments,  $g$  must be equal to an average rate of return of capital,  $\bar{r}$ , which is defined as

$$(19) \quad \bar{r} = \frac{r_1 K_1 + r_2 K_2}{K_1 + K_2} = \lambda r_1 + (1-\lambda) r_2$$

And we can have

$$(20) \quad \bar{r} = H \lambda \left( \frac{\lambda}{1-\lambda} \right)^{\alpha-1}$$

where

$$H = \left( \frac{1-\beta}{\beta} \right)^{\alpha-1} \left( \frac{R}{1-\beta} \right)^{\frac{\alpha-1}{\beta}}$$

We can prove that the average rate of return of capital can be maximized for  $\lambda = \alpha$

$$(21) \quad \bar{r}_{\lambda=\alpha} = \bar{r}^* = \max. [\bar{r}]$$

Thus we can also say that the rate of capital accumulation is maximized for  $\lambda = \alpha$ . According to the characteristics of the Cobb-Douglas production function,  $\alpha$  means the income distribution ratio to capital in a capital goods industry. Thus it follows that if the stock allocation ratio  $\lambda$  is equal to the income distribution ratio to capital in a capital goods industry  $\alpha$ , the rate of capital accumulation is maximized.

9. According to (20), (17) and (18) become as follows :

$$(22) \quad g_1 = H\phi\left(\frac{\lambda}{1-\lambda}\right)^{\alpha-1}$$

$$(23) \quad g_2 = H(1-\phi)\left(\frac{\lambda}{1-\lambda}\right)^{\alpha}$$

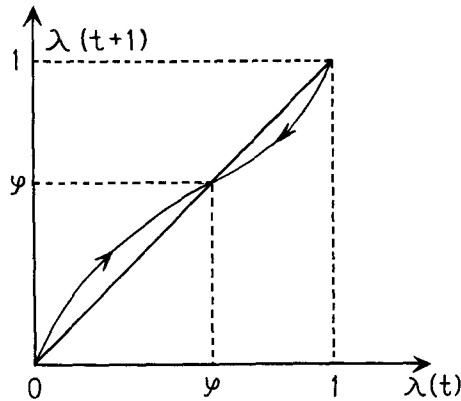
Thus we have the following relations

$$(24) \quad K_1(t+1) = (1+g_1) K_1(t)$$

$$(25) \quad K_2(t+1) = (1+g_2) K_2(t)$$

From either of these relations, we can have

$$(26) \quad \lambda(t+1) = \frac{1 + \phi \left[ \frac{\lambda(t)}{1-\lambda(t)} \right]^{\alpha-1} \frac{H}{H}}{1 + \lambda(t) \left[ \frac{\lambda(t)}{1-\lambda(t)} \right]^{\alpha-1} \frac{H}{H}} \cdot \lambda(t)$$



Analysing the characteristics of this relation, we can get the following points :

- 1) time path  $\lambda(t)$  steadily converges to  $\phi$ ,

$$\lim_{t \rightarrow \infty} \lambda(t) = \phi,$$

- 2) if we can take  $\phi = \alpha$ , time path  $\lambda(t)$  steadily converges to  $\alpha$ ,
- 3) as we have already shown that the rate of capital accumulation can be maximized for  $\lambda = \alpha$ , if we can take  $\phi = \alpha$ , this economy steadily approaches the optimal situation.

10. These results show that there exists only one optimal investment allocation ratio to the capital goods industry. This optimal ratio is independent of the planning horizon, but depends on a given technological situation.

**REFERENCES.**

- Dobb, M., [1], *An Essay on Economic Growth and Planning*, London, 1960.
- Domar, E. D., [1], *Essays in the Theory of Economic Growth*, Oxford, 1957.
- Mahalanobis, P. C., [1], Some Observations on the Process of Growth of National Income, *Sankhyā*, 1953, 12, Part 4.
- Mahalanobis, P. C., [2], The Approach of Operational Research to Planning in India, *Sankhyā*, Dec. 1955, 16, Parts 1 and 2.
- Mahalanobis, P. C. and M. Mukherjee, [3], Operational Research Models used for Planning in India, contained in *The Proceeding of the Second International Conference on Operational Research*, 1961.

## PECULIARITIES OF MARITIME LABOR

—with special reference to the supply of maritime labor—

Hiromasa YAMAMOTO

The life and working conditions of seamen are in many ways different from those of workers on land. When they are on board ship, a ship is not only their place of work but the place where they have to spend almost all of their off-duty hours. During voyages they have to forego enjoying home life and various kinds of social activities on land. In addition the actual working hours on sea are fifty-six hours a week for watch standers, though their work on Sundays and holidays are compensated for with overtime rates. Technological development of ship construction and also of navigation have removed most of the perils of the sea, but still seafaring is one of the dangerous occupations. These characteristics peculiar to the working conditions of maritime labor are disadvantageous to seamen.

In recent years workers on land have gained shorter hours of work and improvement in real income, which has enabled them to enjoy their leisure hours in and out of their homes. Under these social circumstances it seems probable that a seaman tends to dream of home life, and that in contrast he will get a distaste for maritime labor because of the peculiarities of working conditions. Job-seekers would gradually less prefer to go to sea because of the same reason. These changes in the taste of working conditions of maritime labor would tend to lead to higher wages for seamen in comparison with these of workers on land. The writer intends to follow the trend of labor supply in the Japanese shipping industry and to examine the validity of the above-mentioned hypothesis in the case of Japanese seamen.<sup>(1)</sup>

### *I. Peculiarities of Maritime Labor and Labor Supply*

Statistics of the job exchange service for seamen show that in the last ten years the ratio of supply of maritime labor against demand has been gradually decreasing. Especially is this true in the case of unlicensed seamen where the labor market has shown a different phase from the usual since 1960; the volume

---

(1) A similar attempt with regard to seamen of the United States is found in the following article: L. A. Rapping, "The Subsidy and Labor Cost" in Ferguson and others, *The Economic Value of the United States Merchant Marine*, 1961.

of demand surpassing that of supply. (Table 1.)

If we compare the two periods, that is, 1956 to 58, and 1962 to 63, with regard to the labor movement of seamen, in the latter period the flow-out of labor as compared with the flow-in increased considerably, and also the flow-out of active labor force which consisted of age groups under thirty years of age became clearer. (Table 2.)

In addition, in recent years, at entrance examinations of mercantile marine colleges and other vocational training schools for seamen the number of applicants and also the ratio of the number against that of persons to be admitted has gradually decreased.

It has also been pointed out that in the last several years a considerable number of mercantile marine college graduates entered into services on land other than shipping, though they could have easily found posts in shipping companies.<sup>(2)</sup> The above-mentioned facts appear to be symptoms that seafaring has become less attractive to young people and also to the seafarers themselves.

Other available surveys also suggest that seafarers find their jobs less attrac-

Table 1. Job Exchange Service for Seamen

A. Licensed Officers

Date	Jobs offered (A)	No. of applicants (B)	Those newly employed	$\frac{B}{A} \times 100$
1954	7,466	3,929	3,748	189,7
1956	7,853	5,718	4,925	137,3
1958	7,993	5,244	4,560	152,3
1960	8,424	8,624	6,171	102,4
1962	10,959	11,533	7,165	95,1
1964	10,684	9,284	6,353	115,1

B. Unlicensed Seamen

Date	Jobs offered (A)	No. of applicants (B)	Those newly employed	$\frac{B}{A} \times 100$
1954	15,091	9,483	8,868	159,1
1956	15,304	11,194	10,033	136,6
1958	14,948	9,992	8,942	149,6
1960	14,248	15,606	11,089	91,3
1962	17,973	21,651	13,407	83,0
1964	15,499	17,972	10,783	86,3

Source: Ministry of Transportation, Seamen's Labor Survey

(2) H. Yamamoto, "On Industrial Relations in Japan's Shipping Industry" Kobe Economic and Business Review, No. 10. p. 58.

Table 2. Labor Movement of Seamen  
A. Licensed Officers

	1956	1957	1958	1962	1963
No. of newly hired employees	3,713	3,452	2,578	3,125	3,151
New entrants	1,787	1,536	1,051	1,055	—
Experienced	1,926	1,916	1,427	2,070	—
No. of separated employees	1,812	2,200	2,604	3,734	4,205
Those moved to other shipping firms	521	585	679	1,051	1,302
Retired and those left shipping industry	1,291	1,615	1,925	2,683	2,903
19 year or less	16	25	49	28	33
20~29 years	508	575	599	1,035	989
30~49 years	547	669	767	1,006	1,086
50 years or more	221	346	510	614	795

B. Unlicensed Seamen

	1956	1957	1958	1962	1963
No. of newly hired employees	8,111	8,053	5,458	8,412	10,459
New entrants	4,672	4,416	3,074	3,598	—
Experienced	3,439	3,637	2,384	4,814	—
No. of separated employees	4,190	4,751	5,606	8,017	10,918
Those moved to other shipping firms	1,181	1,190	1,626	2,680	3,827
Retired and those left shipping industry	3,009	3,561	3,980	5,337	7,092
19 years or less	503	541	578	1,017	1,348
20~29 years	1,695	1,955	1,746	2,650	3,478
30~49 years	589	798	1,034	1,100	1,660
50 years or more	222	267	622	501	606

Source: Ministry of Transportation, Seamen's Labor Survey.

tive. When the personalities of workers in different industries were examined, the personalities of seamen were on the average the most inactive in comparison with other industrial workers. The research also showed the low morale of Japanese seamen in general.<sup>(3)</sup>

In 1956, research members of Tokyo Mercantile Marine College did an opinion research of seamen as to how they felt about their jobs. According to

(3) Bureau of Seamen, Ministry of Transportation, "Kaijo Rodo Chosa Hokoku" (Research Report on Maritime Labor) No. 11.



the result of the survey those who wanted to continue their work amounted to only about a third of the total answers. According to another opinion research enforced in 1955, in case of workers engaged in various fields of occupations the percentage of those who were satisfied with their occupations was on average 55 percent.<sup>(4)</sup> If we compare these two figures, it is clear that seamen were less satisfied with their occupation than other workers. According to the former survey, their dissatisfactions were based on the following reasons.

1. A seaman has little chance to enjoy home life.
2. There are few securities for old age after retirement.
3. On board ship it is difficult for seaman to enjoy private life even during off-duty hours.
4. The future of his life as a seaman is not promising.
5. A seaman is restricted in the variety of recreation or participation in social and cultural activities.
6. A seaman is provided with fewer holidays than workers on land.
7. The wage and pay of a seaman do not match the work.
8. Duties on board ship often lead to overwork.
9. His occupation as a seaman is not properly appreciated by the public.
10. He feels uneasiness concerning his children's education.

Many of the reasons in which seamen found their occupation undesirable were related to the peculiarities of their working conditions, while complaints about their wages ranked seventh. But it does not necessarily mean that in any decision as to whether they would remain in their jobs or leave for land they would attach more importance to working conditions. Generally speaking, when a worker selects his job or employer, he gives much thought to wages and fringe benefits as well as to other working conditions. From this context, it might be said that the seaman who pointed out the peculiarities of maritime labor as the reason of his dissatisfaction to his occupation also felt that he was unduely being paid lower wages for what he had to sacrifice by being on board ship. In other words, if he could receive a wage which he could regard as being sufficient compensation for his sacrifice, he would be less dissatisfied with his life on board ship.

The survey of opinion research for seamen in 1956 was the first attempt of this kind, so there has been no data to compare it with. Consequently, it is impossible to ascertain how the opinion of seamen to their occupation has changed in the historical trend during in which the level of living has generally improved, or whether more seamen have become satisfied with their wages

---

(4) T. Nishibe, *Nippon no Sen-in (Japanese Seamen)* 1961. p. 126.

and working conditions from the results of the survey of 1956. However, it does appear to be true that as the level of living has generally improved, seafarers have tended to be more conscious of the peculiarities of maritime labor as serious handicaps of their occupation. If we recall the history of the labor movement concerning shorter hours of work, it is generally admitted that with the improvement in the level of income the laborer tends to attach more importance to shorter hours of work and more leisure time in comparison with the wage earned. In Japan after World War II wages and the level of living of workers have improved. In company with this many of the trade unions in manufacturing and other industries on land began to obtain shorter hours of work by collective bargaining, and some of the large companies have been giving their employees two holidays a week. In addition, the word "leisure time" has become popular with the public in the last ten years. Trade unions, management, and also journalism have given greater attention to shorter working hours, paid vacations, recreation, and the spending of leisure time. It may be quite natural that seamen have gradually tended to consider the peculiarities of maritime labor as a serious handicap of their occupation and to demand higher wages than before as compensation for their working condition in an atmosphere where people have begun to make much of leisure time. In other words, as the general level of real income has improved, seamen desire higher wages as compared with other occupations of comparable skill.

If we compare the changes in monthly earnings of unlicensed seamen and manufacturing workers of the last six years, the monthly earnings of the former show a more rapid increase than that of the latter. (Table 3). It appears to be proof of the above-mentioned hypothesis. But, in order to examine its validity, it is necessary to give a brief survey of the labor market of the

Table 3. Monthly Earnings of Unlicensed Seamen and Manufacturing Workers

	Cash earnings (Yen)		Index of real income	
	Seamen	Manufacturing workers	Seamen	Manufacturing workers
1960	25,172	22,983	100.0	100.0
1961	28,325	24,719	106.9	102.1
1962	31,630	26,930	111.7	104.2
1963	34,936	29,559	114.7	106.3
1964	39,795	32,533	125.9	112.7
1965	43,574	35,803	127.8	115.1

Note: 1. covers seamen on board steamers.

Source: Seamen's Labor Survey, No. 32., p. 6.

Japanese shipping industry.

## *II Structure of the labor market of seamen*

Job organization on board ship is composed of the deck, engine, radio, and steward departments. Seamen are classified as licensed officers and unlicensed seamen. Deck and engine-room departments are composed of both officers and seamen, while the steward department is composed of seamen in contrast with the radio department which is made up of officers. In order to be qualified as a licensed officer a man has to pass the examination given by the ministry of transportation after he has either finished the course of a mercantile marine-college or high school, or has experienced three years' work as a seaman. There is no legal qualification for unlicensed seamen with the exception of the age restriction. National organizations for seamen's training courses provide boys of sixteen years old and over with the necessary knowledge and training needed for seamen for a year. Those who want to be unlicensed seamen either take the seamen's training course or go to sea immediately after they have finished middle school. Seamen are promoted to upper grade jobs with the increase of their years of experience. In Japan there is a system for a seaman to be promoted to an officer if he is qualified for the position. But in most cases officers of ocean-going vessels have finished a mercantile marine-college or high school, while most officers of coastal vessels have been promoted from seamen.

How is the ease of labor movement to and from the shipping industry? Can we find similar jobs to that of seamen in other industries than shipping? In the fishing industry we can find several kinds of similar jobs, but there are very few shore-industries where we can find similar jobs to shipping, resulting in the difficulty of movement for seamen to other industries. All jobs of the deck department are peculiar which can be found only in the shipping industry. Therefore it is quite difficult for deck officers and men to find suitable jobs in shore industries. For engine-room and radio officers and men the flow-out from the shipping industry is not as difficult as that of the deck department, but the flow-in to jobs in the engine-room and radio departments from shore industries are restricted because officers of the engine-room and radio departments must be qualified with a national license which is different from that of shore industries. Jobs in the steward department such as cooks, bakers, and stewards are to be found on shore. In short seamen find difficulties in changing their jobs to shore industries, though those of the steward department seem to be an exception, while the flow-in of labor force into shipping is also restricted

by legal restrictions and the needed skill. In the shipping industry the supply of labor is inelastic relative to the change of demand.

In the next step it is necessary to point out the institutional characteristics of the labor market of the Japanese shipping industry. In 1963 the total number of merchant seamen who were employed amounted to 98,823. Among them about eighty per cent on board merchant steamers were organized into the All Japan Seamen's Union, which included both officers and unlicensed seamen, while seamen on board sailing ships with engine were not unionized with a few exceptions.<sup>(1)(2)</sup> The seamen's union concludes union shop agreements with shipping companies. Though organizations of shipping companies for collective bargaining reorganized several times during the last twenty years, if we pay attention to the pattern of their collective bargaining and the contents of trade agreements, steamship companies may be classified into the following three groups; the group composed of companies engaging in ocean transportation, the group of companies engaging in mainly near-sea trade and also shipowners whose ships are chartered by the companies belonging to the first group, and the group of small shipowners engaging in coastal trade with steamers under 1,000 gross tons.

Table 4. Number of Merchant Seamen employed

	Merchant fleet		
	Steamer	Sailing ships with engine	Total
1946	56,517	81,409	137,926
1948	53,048	76,087	129,135
1950	44,330	42,425	86,755
1952	49,237	39,387	88,624
1954	47,782	37,321	85,101
1956	52,732	34,891	87,623
1958	63,737	26,396	90,133
1960	70,896	25,843	96,739
1963	75,005	23,818	98,823

Note: Statistics covers seamen to whom the Seamen's Law applies. Consequently seamen on board 1) ships of five gross tons or less, 2) ships engaging in inland water transportation, are excluded.

Source: The Ministry of Transportation, Seamen's Labor Survey.

(1) All Japan Seamen's Union, Katsudo Hokokusho (Annual Report), 1963, p. 12.

(2) A few comments are necessary for sailing ships with engines. Though statistics show this category of ships made of wood as sailing ships, a large number of them lack sails completely and even in the case of ships providing sails their main propulsion power is based on engines. The size of these ships range mainly from twenty to three hundred gross tons.

Among the three groups there are large wage differentials, though hours of work and other working conditions are nearly standardized. In addition, between the seamen on board sailing ships and those on steamers there are larger wage differentials, and in 1961 the monthly earnings of the former were less than half the latter. (Table 5) Such large wage differentials among shipping com-

Table 5. Wage Differentials among Shipping Firms

A. Seamen on board steamers, as of June 1961 (1)

Group of firms	Licensed officers		Unlicensed Seamen	
	Age	Monthly earning (yen) <sup>2</sup>	Age	Monthly earning (yen) <sup>2</sup>
Ocean-going ship operators	34, 5	58, 475	31, 7	34, 659
Coastal ship operators	37, 7	45, 407	31, 2	25, 485

Note: 1. Table covers seamen employed by members of JSA.

2. Monthly cash earnings when on board ship.

Source: Senshu-dantai Kyogikai.

B. Seamen on board steamers and those on board sailing ship  
as of July 1961

	Licensed officers		Unlicensed seamen	
	Age	Monthly earning (yen)	Age	Monthly earning (yen)
Steamers	35, 7	57, 797	29, 1	33, 889
Sailing ships with engine	38, 8	27, 898	29, 9	16, 647

Source: Seamen's Labor Survey, Extra Issue of July 1961.

panies were due to the difference of productivity of labor on the one hand, but they reflected the differences of personnel management among shipping companies, on the other hand. The largest shipping companies selected their employees from new graduates and trainees from mercantile marine colleges and training schools, and encouraged their continuous service by means of longevity pay and promotion. They seldom hired seamen who had worked under other employers. Shipping companies which engage in ocean transportation adopted more or less a similar personnel management. Consequently seamen who were employed by foreign-going ship operators seldom changed their employer. In contrast seamen on board coastal steamers and sailing ships often changed employers. (Table 6)

Table 6. Continuous Employment of Seamen Employed  
by Main Shipping Firms <sup>(1)</sup>  
(as of June, 1960)

A. Licensed Officers

	Total (A)	Those ever employed by other firms (B)	B/A (%)	Average years of continuous employment
Total	15,271	5,326	35	7.8
Ocean-going ship operators	13,383	4,092	31	8.1
Coastal ship operators	1,888	1,234	65	5.4

B. Unlicensed Seamen

	Total (A)	Those ever employed by other firms (B)	B/A (%)	Average years of continuous employment
Total	33,487	9,747	29	8.0
Ocean-going ship operators	29,309	7,727	26	8.5
Coastal ship operators	4,169	2,020	28	4.8

Note: 1. Statistics relate to seamen employed by members of the Japan Shipowners' Association.

Source: Senshu-dantai Kyogikai (Associated Committee of Shipowners for Collective Bargaining).

According to the research of the Institute of Labor Science during the period of 1952 to 1957 the greater part of trainees of vocational courses for unlicensed seamen come from rural areas, and trainees whose fathers engaged in agriculture or fishing amount to 47.8 per cent of the total. The same research reveals that students of mercantile marine colleges come mainly from large cities, and a considerable number of pupils of mercantile marine high schools come from prefectures facing the Seto Inland Sea. The research did not cover seamen who go to sea without vocational education, but it is generally admitted that they come from the rural areas of Chugoku, Shikoku and Kyushu districts.<sup>(3)</sup>

As we have pointed out, there were large wage differentials among seamen who were employed by different companies, and the earnings of seamen on board sailing ships were lower than those of manufacturing workers. (refer to Tables 3 and 6) Under these conditions we should carefully avoid reaching

(3) T. Nishibe, op. cit., pp. 15-16. also refer to K. Yoshimura, Chosa Yoroku, 1940, pp. 125-46.

a conclusion on the validity of the hypothesis by means of a comparison of average wages and earnings between seamen and other occupations, but attention should be paid to the lowest price of the labor supply to the shipping industry.

### *III Peculiarities of Maritime Labor and Seamen's Wages*

Is it possible to prove the hypothesis that the change of taste of seamen to the peculiarities of maritime labor leads to favorable wage differentials relative to workers on land? The following reasons make it quite difficult to solve this problem. In the first place, as important factors which influence the level of wages in some industries we might point out the productivity of labor, the change in the price of the product, the impact of trade unionism, the degree of monopoly in the product market, the change in the structure of the labor force in an industry. It is difficult to measure the individual influence of these factors. As to more fundamental difficulties we are confronted with is the fact that the change of taste of seamen to the peculiarities of maritime labor does not produce a wage increase directly, but it leads to a dwindling of the labor supply at the present wage level, on the one hand, and it influences the amount of wage increase that the seamen's union demands in collective bargaining, on the other hand. Therefore it is difficult to separate the effect of the change of taste upon wage with the impact of trade unionism.

In addition, a wage increase often results in an ex post improvement of labor productivity through the introduction of labor saving apparatuses. Consequently some part of a wage increase which can be explained by the improvement in productivity of labor is also due to the change of the taste of seamen to the peculiarities of maritime labor.

However, in rough form it is possible to show statistically the mechanism of wage increases of seamen due to the change of their taste for the peculiarities of maritime labor.

In order to simplify the explanation, we will deal with the case of unlicensed seamen. Table 7 shows the average monthly earnings of unlicensed seamen on board ships of various categories and sizes. It also shows the change in ages and duration of service of unlicensed seamen on board ship. The monthly earnings and age structure of seamen thus classified correspond roughly with those of seamen employed by respective groups of shipping firms which engage in different trades and maintain collective bargaining separately from the seamen's union; sailing ships with engines are operated by small shipowners whose employees are in most cases not unionized, and respective

Table 7. Average Monthly Earnings and Years of Service of Seamen by ship categories on board ship (Unlicensed seamen)

		1958	1961	1963	
Sailing ships with engines	Age	26.0	29.9	32.2	
	Years of service	7.0	9.4	11.1	
	Monthly earnings (Yen)	10,724	16,647	20,251	
Steamers	Under 500 G.T.	Age	27.2	27.4	28.0
		Years of service	8.2	5.4	7.5
		Monthly earnings (Yen)	15,762	20,292	24,380
	1,000 G.T. and over to under 3,000 G.T.	Age	29.0	28.7	29.4
		Years of service	10.2	9.2	10.3
		Monthly earnings (Yen)	21,985	29,734	31,497
	5,000 G.T. and over	Age	29.1	30.2	31.2
		Years of service	10.6	11.6	12.5
		Monthly earnings (Yen)	29,871	39,522	42,294

Source: Ministry of Transportation, Seamen's Labor Survey, No. 5, No. 25 and Extra Issue of July 1961.

classes of steamers correspond to the groups of shipping firms engaged in coastal trade, coastal and near-sea trade, and ocean transportation.

In considering the change in the average age structure of seamen during this period, we find that seamen on board sailing ships are older by about six years and their years of experience increase the same number of years while seamen on board steamers of different sizes are two years older at the maximum. This fact indicates that in case of sailing ships there were few new entrants and that the flow-out of seamen was covered by experienced seamen of older years, while in the case of steamers the turn-over of labor proceeded as usual. During the same period the monthly earnings of seamen on board sailing ships which were not influenced by the change in age structure or duration of service doubled,<sup>(1)</sup> and showed the largest increase in ratio. As we have

(1) The large shipping companies have adopted a wage system in which longevity pays amount to a considerable part of the total. Promotion to an upper grade is also based on the duration of service in the same company. Therefore in the case of seamen employed by large shipping companies their earnings increase in proportion to the increase in their years of service and ages, even if they remain in the same posts. But in case of seamen on board sailing ships their wages are determined as a rule according to their jobs with no consideration given to age or duration of service.



pointed out in the preceding section, there were large wage differentials among shipping companies according to the trade or the size of ships which the company operated, and seamen on board sailing ships were paid the lowest wages and pay. Therefore, the wages of seamen on board sailing ships were the lowest supply price of seamen's labor, and it doubled during the period of 1958 to 1963.

Hereafter we shall concentrate our attention on the labor supply and earnings of seamen on board sailing ships. The few entrants among younger seamen into the labor market of sailing ships was partly due to the shrinkage in opportunities for employment (refer to Table 3), but it might also be due to the unattractiveness of the job to possible applicants in comparison with other available jobs. The districts from where most of seamen on board sailing ships have come are, as we have pointed out, rural areas facing the Seto Inland Sea and also those of Kyushu Island, and the occupations of their families are mainly small farmers and fishermen. The flow-out of labor from rural areas is needless to say due to the differentials of earnings between industrial workers and agricultural and fishing workers based on the differentials of their productivity. Labor in rural areas flows out into large cities and also industries in nearer districts. They choose the most favorable job opportunity, but when they fail to get a desirable job opportunity due to the conditions of demand they are forced to find the second-best job opportunities until they can get their desired jobs. Those who fail to get jobs in large cities try to find job opportunities in near by districts where are unfavorable wage differentials as compared to large cities. Seamen on sailing ships are one of the job opportunities. On the other hand, in the case of experienced seamen on board sailing ships who desire to change their occupation and find work on land, the chance of finding job opportunities are severely restricted because not only are there few working places on land for them to make best use of their experiences, but because of the employment policy of large establishments in various fields of industries which as a rule hire new graduates from school, limiting employment of those who have had experience of work under other employers. Consequently, they have to seek job opportunities as unskilled laborers, and in most cases they are employed either by small firms as regular employees or by large firms as day workers.

Table 8 shows the change in average monthly earnings in the last ten years of seamen on board sailing ships and day workers. It also shows the average regional monthly earnings in ten prefectures from where the greater part of seamen on board sailing ships come. The regional monthly earnings

Table 8. Comparison of Monthly earnings of Unlicensed Seamen on board sailing ships with engines and those of other occupations

	Unlicensed seamen	Average Regional earnings of particular districts 1)	Extra-day worker 2)
1955	9,805	16,560	9,225
1964	29,193	31,329	19,175
1955	100	169	94
1964	100	107	66

Note: 1. Average regional monthly earnings of regular employees in ten prefectures where most unlicensed seamen have come from.

2. Calculated on the basis that day workers work twenty-five days a month.

Source: Ministry of Transportation, Seamen's Labor Survey. Ministry of Labor, Monthly Labor Survey.

indicate the possible earnings which can be earned by most of those who newly enter the labor market in those areas. The monthly earnings of day workers indicate the earnings that experienced seamen would get on land. The table shows clearly that on the one hand, earnings of seamen approach nearly the same level as the regional monthly earnings, while on the other hand seamen have gained favorable earning differentials against dayworkers. These relative change in earnings, especially that of seamen, correspond with the change in the age structure of seamen on board sailing ships as shown in Table 7. In other words, their earnings were raised to a level that was necessary to secure a crew for sailing ships, restraining their flow out, though it was not high enough to introduce a flow-in of a younger labor force.

If we recall the fact that sailing ships are a marginal trade which are destined to disappear due to their low productivity and the decrease in the demand of such labor and that most of the seamen on board are not unionized, and also that during the period of the economic growth of Japan a relatively short supply of labor resulted in the whole economy, the relative change in earnings of seamen suggests that the change in the taste of the experienced seamen for the peculiarities of maritime labor led to the rapid increase of their earnings.

Due to the lack of statistics of wage rates and hours of work with regard to seamen on board sailing ships and those of regions with which we are concerned, much can not be said about them. But according to the result of my interview with seamen their hours of work on board sailing ships did not change during the period. During the same period the average monthly total hours of work in all industries and manufacturing industries in the whole economy maintained nearly the same level, though monthly scheduled hours of

work showed a decrease in case of large firms of manufacturing industries.<sup>(2)</sup> Therefore, if it is permitted to consider that the monthly hours of work of the regions with which we are concerned followed a similar trend as those of the whole economy, it might be said that the wage rate of seamen on board sailing ships had a similar change in monthly earnings relative to regional occupations.

The raise of wages of seamen on board sailing ships, which is the lowest supply price of seamen's labor, seems to have had a favorable influence upon the wages of seamen on board coastal steamers which would otherwise have been suppressed by the lower wages of the former which compete in the same products market. In the next step the raising of wages of seamen on board coastal steamers influenced the wages of those on board steamers engaged in near-sea trades which are in competition with the former because a considerable number of coastal steamers and near-sea steamers may engage in both trades interchangeably. In turn, the raise of the lowest supply price of seamen's labor would lead to an overall raise of their wages in different categories. These processes would result in larger and more favorable wage differentials for seamen as against workers on land.

Some important reservations should be placed on our explanation. Though our consideration is confined to the labor market of seamen in the last several years, the problem with which we are concerned should be treated after a lapse of a longer period if we take into consideration the inelasticity of the labor supply of seamen. However some validity to this explanation might be given because of our method of treating seamen on board sailing ships where the demand of labor has been declining.

---

(2) Yearbook of Labor Statistics, 1955, pp. 244-45 and p. 275, 1964, pp. 203-4.

## LOS ESTUDIOS DEL BRASIL EN EL JAPÓN —Con Referencia a las Ciencias Sociales—

Yoshiaki NISHIMUKAI

### I. LA SITUACIÓN ACTUAL DE LOS ESTUDIOS DEL BRASIL

Después de la Guerra Mundial II, como sabemos, las situaciones mundiales han mudado su estructura notablemente y los problemas nuevos y importantes se han producido en la política y la economía. En el campo de la política internacional, “relaciones entre Este y Oeste” o sea las relaciones entre los países democráticos y los países socialistas, se hace un problema importante, y, en otra parte, en el campo de la economía internacional, los “problemas entre Sur y Norte”, o sea los problemas entre los países desarrollados y los países sub-desarrollados también se hace importante.

Enfrentando con las nuevas condiciones del mundo, las ciencias sociales deben preparar las nuevas armas teóricas para resolverlas. Por ejemplo, en el campo de las ciencias económicas, el estudio de la teoría del desarrollo económico de los países sub-desarrollados ha aparecido como el campo nuevo. En el proceso de estudiar, se han reconocido la necesidad y la importancia del estudio y la investigación de la política, la economía, y la sociedad de estos países, lo que también se sabe en los otros campos de las ciencias sociales. En todos los campos, la necesidad de los estudios extranjeros se hace urgente.

Pero, la necesidad de los estudios extranjeros ha surgido no sólo de la demanda práctica basada en la actualidad mundial después de la Guerra, sino de la reconocimiento de la necesidad del entendimiento mutuo de los países. Desde la Guerra Mundial II, cada país del mundo experimentó la pobreza del conocimiento y el entendimiento sobre los otros países. Por eso, es natural que cada país haga el entendimiento mutuo más profundo y promueva el intercambio cultural.

Pues bien, desde este punto de vista, considerando la situación actual de los estudios del Brasil en el Japón, no podemos menos de enfrentar la actualidad desdichada. Los estudios del Brasil en el Japón están en el grado muy bajo. El estrato de los especialistas disciplinados es delgado, las facilidades y las organizaciones para estudiar son muy insuficientes, por eso, los frutos de los estudio son escasas. De 1964 a 1965 (dos años), los artículos científicos, los datos, los comentarios sobre la economía, la política, y la sociedad

ad publicados en el Japón suman a 17,758 en total, de los cuales los referidos a la América Latina ocupan 119, es decir 0.66% y, sobre todo, los referidos al Brasil, solamente 22, o sea 0.12%. Observando solamente de los artículos científicos, la proporción disminuye más; los referidos a la América Latina, 51 (0.31%), de los cuales, los al Brasil solamente 16 (0.09%). Es difícil confiar esta cifra para los hombres quienes saben la historia larga entre el Japón y el Brasil, pero desdichadamente es la realidad.

¿Por qué se quedan en el grado tan bajo los estudios del Brasil en el Japón? Las causas principales son (1) la actitud tradicional de los estudios extranjeros en el Japón y (2) la actitud de los científicos sociales en el Japón.

Ante todo, vamos a reflexionar la historia de los estudios extranjeros en el Japón. Desde la época de Meiji, el fin tradicional de los estudios extranjeros en el Japón era absorber la cultura de los países desarrollados y promover su modernización. Esta actitud japonesa pudiera ser inevitable porque el Japón estaba notablemente atrasado a la corriente mundial por causa del aislamiento largo y tenía la necesidad de absorber y introducir los conocimientos y las técnicas de los países desarrollados. Siento mucho que en la actualidad, 100 años después de la Restauración de Meiji, se queda firme tal actitud. Aquí vuelvo a citar los mismos datos que los anteriores. De las tesis, los artículos, los comentarios sobre las regiones extranjeras, los referidos a la Europa occidental ocupan 44.3%, y los a la América del Norte, 19.7%, es decir, los relacionados a los llamados países desarrollados ocupan 64% de todos. Los referidos a las regiones sub-desarrolladas o en desarrollo, a excepción de la cifra de 20.3% de los a Asia que tiene relaciones íntimas con el Japón, indican la proporción muy baja; los a la América Latina, 4.4% y los a Africa, 3.8%. Como muestran estas proporciones, en el Japón es tradicional el pensamiento que los estudios extranjeros quieren decir los estudios sobre los países desarrollados.

Esta tradición introdujo la metodología errónea a los estudios extranjeros. Se introdujeron al Japón las ciencias sociales desenvueltas en la moda del diferencialismo científica en Europa en el siglo XIX. Por eso, en caso de que el Japón entienda los países extranjeros, tiende a estudiar los objetos solamente desde el punto de vista especial. En Europa se heredan las civilizaciones clásicas de Grecia y de Roma, y se tiene la tradición cristiana como base común. Por lo tanto, en Europa, cuando se estudiaron uno a otro, no era irracional analizar directamente desde el punto de vista especial. Porque, en el análisis de los fenómenos nacionales especiales había posibilidades suficientes de encontrar el principio universal, y además de las posibilidades había el entendimiento mutuo que estaba basado en el clima cultural común. Por otra parte,

en el Japón con el clima cultural heterogéneo, se introdujo la misma metodología que en Europa, lo que era útil para absorber los conocimientos y las técnicas por cada campo especial, pero no sirvió suficientemente para entender qué son Inglaterra, Francia y Alemania, es decir, la nacionalidad, la cultura, los sistemas diversos de estos países. Pero, no pudiera evitarlo en los estudios extranjeros en el Japón que tienen el fin principal de absorber las culturas avanzadas.

Aquí aparece un problema importante. Es el problema de que los estudios del Brasil en el Japón suceden el método tradicional. Como se sabe bien, las relaciones directas entre el Japón y el Brasil se han hecho intensas por medio de la emigración. En el caso de la emigración, sería importante entender el Brasil como país-recibidor de los japoneses más bien que absorber la cultura avanzada. Al mismo tiempo, serían necesarios los esfuerzos por hacer entender a los brasileños qué tal país es el Japón y qué tales pueblos son los japoneses. En este sentido, los estudios del Brasil en el Japón debían ser distintos de los estudios extranjeros tradicionales.

Sin embargo, en la preguerra, dominaba la corriente científica de que los estudios extranjeros significaban los de los países desarrollados. Los especialistas disciplinados de las ciencias sociales creadas en la Europa y en la América analizaron los países desarrollados con los instrumentos analíticos creados en las dos regiones. La metodología, la teoría y los modelos resultados de estos estudios se han considerado válidos universalmente a otras sociedades. Por eso, al testificar y refinar sus teorías y modelos, ellos no sintieron la necesidad de estudiar y investigar activamente las regiones cuyos varios datos principales no pudieron ser obtenidos fácilmente. Los científicos sociales pensaron que los estudios, por ejemplo, de Inglaterra contribuyeron a la teoría económica, política, y sociológica más fácilmente que los estudios laboriosos del Brasil. Especialmente los economistas japoneses han tenido tal pensamiento. En círculos académicos se consideraban como herejes los economistas que estudiaban el Brasil o la América Latina. Así, antes de la guerra los estudios del Brasil se hicieron por muy pocos especialistas disciplinados y pocos interesados en la emigración. Pero estos estudios tuvieron el fin esencial de promover la emigración y se consideraron importante dar la base directa a la política emigrante. Por eso, no se hicieron suficientemente el entendimiento interno del Brasil.

Sin embargo, la transformación de las relaciones entre el Japón y el Brasil después de la guerra estimuló bastante los estudios del Brasil. Como el Japón perdió las regiones emigrantes y una parte del territorio en Asia, la América Latina, especialmente el Brasil, se hizo la región emigrante más importante, y la emigración por sí misma cambió su carácter temporario en el permanente.

Además, desde la década de 1950 las empresas japonesas han encontrado sus campos de actividades en el Brasil, y recientemente las relaciones entre el Japón y el Brasil van a entrar en la etapa nueva en el sentido de que éste necesita de capital más que de trabajo, y de la cooperación económica más que la emigración. Esta transformación necesita el entendimiento del Brasil no sólo para la promoción de la emigración, sino para atender a las nuevas relaciones económicas. Así, recientemente los intereses académicos por el Brasil vienen a crecer. Esta tendencia se ve bien especialmente en las humanidades como la historia, la geografía, y la antropología, y también en algún grado en las ciencias sociales.

Sin embargo, por el presente, el método de los estudios del Brasil en el Japón se limitan a profundizar los objetos por cada campo especial, lo cual es mismo en el caso de absorber los conocimientos y las técnicas de los países desarrollados. Como hemos indicado, por medio de tal acercamiento, es muy difícil entender el Brasil sintéticamente. Japoneses han estudiado sobre China por largo tiempo y tenemos diersas organizaciones para estudiar y instruir sobre la cultura china. Pero, supimos por las experiencias de la guerra que no entendimos China sintéticamente y internamente, a causa de la acercamiento a los objetos por cada campo especial. Si tomamos el mismo método, los estudios del Brasil en el Japón no podrán menos de andar el mismo camino que en los estudios de China. Aquí, hay una cosa más importante; al estudiar del Brasil, que es distinto del Japón y de los países desarrollados de la Europa y los Estados Unidos, los científicos sociales del Japón intentan acercarlo a base de los instrumentos técnicos dados por los conocimientos europeos. Por ejemplo, en los estudios de la economía brasileña se ve la tendència de analizar por los mismos instrumentos que en los estudios de los países capitalistas desarrollados. En los estudios de la economía brasileña no puede ser totalmente adecuada la adopción de los instrumentos analíticos de la economía moderna que son muy abstractos y están divididos minuciosamente. Aquí existe la limitación de los estudios de la economía brasileña. Además, hay otro problema de que existen las diferencias notables en la profundidad de los estudios por cada campo especial. Por ejemplo, en caso de que se estudian en detalle las técnicas del plan del desarrollo económico del Brasil, si al mismo tiempo no se estudia la base política y social del plan, no es fácil llegar al entendimiento vivido del plan. En realidad, los estudios de cada campo especial no están en el grado igual, y por eso los estudios sintéticos sobre el Brasil son notablemente impedidos. Esto es verdadero no sólo a diversas esferas de las ciencias sociales, sino a los interiores de cada esfera.

## II EL MÉTODO DE LOS ESTUDIOS DEL BRASIL

Los dichos defectos de los estudios del Brasil en el Japón se deben resolver al pronto. Por eso tenemos que manifestar las causas de estos problemas. A mi parecer, se causan de la pobreza metodológica de los estudios extranjeros en el Japón. Si se estableciese la metodología adecuada, podrían resolverse unos de los problemas. Recientemente, los estudios de área—*area studies*—atraen atención extensiva como la metodología de los estudios extranjeros. Estos estudios de área prosperan primero en la América, Inglaterra, Francia, Alemania y Rusia etc.? Qué son los estudios de área? Como el primer paso del entendimiento de esta concepción, tenemos la necesidad de comprender por qué se creó este nuevo método. Primero, a medida que han crecido los intercambios entre los países del mundo después de la guerra, ha aparecido la reflexión fuerte que no se comprenden bien uno a otro; se han parcialmente hecho los estudios profundos y se han obtenidos los conocimientos de los países extranjeros, pero no se ha comprendido sintéticamente un país ni la sociedad ni los pueblos. Por eso, se ha sentido mucho la necesidad del entendimiento profundo y sintético más bien que los estudios especiales por cada esfera. En otras palabras, se ha hecho gran tema, ante todo, el entender la biografía de una nación.

Sin embargo, no es justo considerar que los estudios de área han aparecido como método conveniente solamente a los estudios extranjeros. La causa de la prosperidad de los estudios de área existe en la reflexión substancial de las ciencias en este siglo. O sea, procede de la reflexión contra la tendencia del diferencialismo científico en el siglo XIX. Ha excitado los estudios de área la crítica aguda de que no se puede entender la área objetiva verdaderamente por medio de diferencialismo del siglo XIX. Como sabemos, en el siglo XIX las ciencias y los pensamientos se han especializado mucho y las técnicas metodológicas y científicas se han profundizado y, en consecuencia, los conocimientos detallados sobre cada esfera se han profundizado notablemente, y los conocimientos objetivos y sistemáticos se han incrementado en cantidad y han progresado en calidad. En otra parte, no se puede negar que las ciencias del siglo XIX produjera el prejuicio tendente a los estudios especiales y individuos de las humanidades. Aunque los conocimientos se hicieron profundos de resultados de los reconocimientos fragmentarios y parciales de las humanidades, al mismo tiempo se hicieron dispersos y aislados, y por consiguiente, no pudo evitar el peligro de obstruir el entendimiento vivo o el reconocimiento orgánico y sintético de los objetos. Las ciencias han adelantado notablemente pero acompañado la tendencia esencialmente diferente del pensamiento monístico del



siglo XVIII. La estructura del conocimiento del siglo XVIII era somera pero extensa. También se criticó que era enumerativa y enciclopédica. Pero, en otra parte, el conocimiento se combinó a la vida humana y probó a entender las humanidades sintéticamente. Esto es un gran punto contrastante con el pensamiento científico del siglo XIX.

La reflexión y la crítica por las ciencias del siglo XIX comenzaron a aparecer a principios de este siglo. Este fenómeno se ha desarrollado osadamente y liberalmente en los Estados Unidos donde el pensamiento del siglo XVIII se ha relativamente mucho conservado y luego ha ido a enlazarse a “educación general” en la educación universaria, en la cual el entendimiento sintético y el reconocimiento correlativo de todos los fenómenos culturales han precedido a los estudios especiales. El origen de los estudios de área también existe en este pensamiento. En este sentido, los estudios de área son una metodología por la cual una sociedad es estudiada y investigada como cultura general.

Por lo tanto, los estudios de área deben tener la actitud multilátera y sintética. Es decir, deben ser los estudios integrados de la lengua, la geografía, la historia, la política, la economía, el pensamiento y la literatura de la área objetiva. Pero tenemos que prestar atención al punto siguiente. Los estudios generales o sintéticos no pueden ser el aprender los conocimientos primarios y preliminares como se ve a veces. Debemos atender que la integración o la generalización se confronta con la departamentalización o la especialización y al mismo tiempo se combina íntimamente con éste. En los estudios de área se sostiene la actitud de que las ciencias deben ser integradas y, al mismo tiempo, diferenciadas y nuevamente integradas.

Así, los estudios de área dan importancia a “la integración”. Es natural porque los estudios de área tienen el fin de entender la área objetiva más antes que reconocerla. El problema es cómo se obtiene “la integración”. Será bastante fácil combinar los estudio individualis de los especialistas disciplinados en cada sefera especial. Pero, todavía no es claro cómo la integración se adelanta y se termina en proceso de la combinación. El Prof. E. O. Reishauer dice que los estudios de área aparecen como combinación de los estudios de diversas ciencias y todavía no crean las cosas nuevas.<sup>(1)</sup> Necesitamos más tiempo para encontrar el medio nuevo de la integración.

Sin embargo, a pesar de la dificultad de alcanzar la integración, los estudios de área en los Estados Unidos dan la sugestión particular a los estudios del Brasil en el Japón y también a los del Japón en el Brasil. Esto es que se

---

(1) E. O. Reishauer and J. K. Fairbank, “Understanding the Far East through Area Study”, *Far Eastern Survey*, Vol. 17.

aprende el lengua de área y se estudia el conocimiento de área, como ambos reudas, y además de las dos reudas, se hacen los trabajos de área a fin de completarlos. Es manifiesto que en los estudios de área el campo de estudio más importante sea el de la lengua extranjera. En los estudios de área, el aprender de la lengua de la área objetiva es la orden absoluta. Pero, en este caso, el estudio de la lengua no es el objeto sino un medio para entender la área. En proceso de aprender la lengua de área, sin que entendamos todos otros aspectos de la cultura nacional, no podemos aprender completamente la lengua por sí misma. Por lo tanto, aunque el estudio de la lengua extranjera es aparentemente aislado, se debe considerar como un parte de los estudios inclusivos de la área. Por eso, se requiere unificar el estudio de la lengua y el entendimiento de los conocimientos de otras diversas esferas.

Por lo tanto, en las universidades norteamericanas, además de la educación de la lengua de área, se hacen simultáneamente las lecturas de la historia, la geografía, la antropología, los regimenes jurídicos, la política, la sociología, la literatura, y el arte de la área objetiva. Las lecturas se hacen paralelamente por los expertos de área quienes estudian especialmente una esfera. Los auditorios se esfuerzan por integrar los conocimientos sobre la área objetiva en los estudios inclusivos de las diversas lecciones y por obtener la resolución de qué país es. En este curso, siempre se vigila la lectura cerrada de que un profesor ense a una lección. Se hace una lectura o un seminario por algunos profesores, y se trocan las opiniones especiales por medio de las discusiones activas. Así, se puede obtener el entendimiento y el reconocimiento de cada punto de vista, se alcance la integración que es el fin último de los estudios de área, y al mismo tiempo, se obtiene el base para profundizar las preparaciones científicas sepeci-ales de las esferas por cuales cada estudiante tiene interés. Además, merece atender que la investigación en grupo siempre se requiere como un medio concreto para impedir las malas influencias del diferencialismo en el cual los estudios individuos caen.

Finalmente, los trabajos prácticos es un curso básico de los estudios de área. Se completan por las experiencias directas en la área objetiva los estudios de la lengua y los conocimientos de área en las universidades y otras organizaciones educativas. Las regiones de los trabajos prácticos son diferentes por la especialidad de futuro de los estudiantes disciplinados. Por ejemplo, los historiadores trabajan en el museo de datos de la área, los sociólogos en las ciudades, y los antropólogos en las tribus pequeñas o las comunidades pequeñas. Además, los trabajos prácticos no se hacen individual ni dispersivamente, sino sistemáticamente. Por ejemplo, se establece el centro de la investigación en un

país objetivo en el cual se equipa los libros, las materias, y los utensilios necesarios para los estudios, y tiene los directores que disciplinan efectivamente los estudiantes. A veces, se establecen los laboratorios en las universidades de la área con sus cooperaciones. Sin embargo, trabajos prácticos son demasiado dispendiosos para hacerlos con interés y cargo personales. Por lo tanto, se dan a estos estudios los fondos particulares, por ejemplo, el fondo que tienen las universidades, el subsidio científico de las organizaciones oficiales, y la subvención concedidas por las fundaciones privadas.

### III LOS PROBLEMAS DE LOS ESTUDIOS DEL BRASIL EN EL JAPÓN

En los capítulos sobredichos resumimos los métodos particulares de los estudios de área en los Estados Unidos. Comparando con estos métodos, podemos responder el tema de qué debemos hacer para promover los estudios del Brasil en el Japón.

Primero, debemos aumentar o amplificar las universidades y las organizaciones en las cuales podemos aprender el portugués. Considerando la situación actual del Japón, podemos citar el hecho de que el curso del portugués y del español indispensables para los estudios del Brasil o de la América Latina ha sido negado por casi todos los científicos sociales. Como lenguas extranjeras fuera del inglés, sus intereses se han concentrado exclusivamente al francés y el alemán. Esto es el resultado necesaria de que el fin principal de los estudios extranjeros en el Japón era absorber las culturas avanzadas. Por consiguiente, hoy las universidades y los institutos donde podemos aprender el portugués o el español son muy pocos. En el tiempo de mayo de 1965, hay solo diez universidades que establecen los cursos del portugués o el español como los regulares. El número de los estudiantes son 525 personas en total. La mayoría de estos estudiantes son los de la literatura española y la minoría los de la literatura latinoamericana. Además de dichas universidades, hay ocho universidades donde se enseña la conversación elemental. Hay también unas organizaciones donde se enseña la conversación española en término corto, principalmente en las ciudades grandes, pero no se puede saber el número exacto.

El estudio del portugués está en el estado más difícil. De dichas diez universidades, hay solo dos que enseñan el portugués como curso regular y el número de los estudiantes son solamente 50. Como las oportunidades de estudiar el portugués se limiten notablemente, no puede menos de hacerse delgado el estrato de los especialistas disciplinados de los estudios del Brasil. Al presente, en el Japón no son pocos los estudiosos especializados en el Brasil

que no saben el portugués bien. Esto es el fenómeno mucho más extraño y particular en el Japón que el de estudiar del Brasil desde vista de cada esfera especial y entender el Brasil por medio de los instrumentos modernas de análisis creados en la Europa y los Estados Unidos. Los estudios del Brasil dependen directamente de los datos en inglés y francés, y ponen en contacto con el Brasil solamente por estas lenguas. Si se corrige sólo este fenómeno, progresarán notablemente los estudios del Brasil en el Japón. En este sentido, se debe considerar los proyectos concretos lo más pronto posible para difundir más el portugués.

Segundo, es el problema sobre aprender los conocimientos de la área. En el Japón podemos aprender los conocimientos sobre el Brasil principalmente en las universidades donde se enseñan el español y el portugués. Pero, al presente, hay sólo tres universidades donde se aprenden no sólo los idiomas sino los conocimientos de la área. Además, estas universidades dan gran importancia a los idiomas y la lección de los conocimientos sobre la área es insuficiente. Por ejemplo, en una cierta universidad, se hacen las lecciones de 2,160 horas durante cuatro años, y de las cuales 780 horas (o sea, 36%) se asignan al aprender el idioma, segundo 600 horas (unos 28%) a los estudios generales como las humanidades, las ciencias sociales, y las ciencias naturales. Estos dos estudios ocupan 64% de las horas de todas las lecciones. El resto, 36% se asigna a la obtención de los conocimientos de área que incluyen no sólo los sobre el Brasil o la América Latina sino los sobre otras regiones. Por eso, las horas de las lecturas especialmente sobre el Brasil son muy pocas. En otra universidad, todas las lecturas son 2,220 horas, de las cuales las sobre la América Latina (las sobre condiciones económicas son 20 horas, las sobre la cultura latinoamericana 30 horas, y las sobre la teoría económica en la América Latina 60 horas) son 180 horas en total, o sea solamente 8.1%. Los conocimientos sobre el Brasil se aprenden como un parte de los conocimientos generales sobre la América Latina, y por eso, la obtención de los conocimientos del Brasil ocupa la menos proporción.

Podemos considerar unas causas de que hay muy pocas oportunidades para aprender los conocimientos sobre el Brasil. El cansa más importante está en el hecho de que hay notablemente pocos especialistas de las lecciones componentes de los conocimientos de la área. Como he descrito, en los Estados Unidos, temiendo por la lectura cerrada en el sentido de que un profesor enseña una lección, a veces cada lección se hace por unos profesores. En otra parte, en el Japón, es imposible más bien que difícil obtener un profesor por cada lección, y muchas veces, un profesor enseña unas lecciones como la cultura, la

sociedad, la economía, y la política latinoamericanas.

Tercero, es aumentar las ocasiones de los trabajos prácticos en la área. En la actualidad, son muy frecuentes los casos de que los estudiantes, los especialistas disciplinados, y los profesores universitarios del Japón estudian en los países desarrollados como los Estados Unidos, Inglaterra, Alemania y Francia. Y además, sus muchos casos están basados en el sistema establecido entre el Japón y estos países. Pero, se limitan notablemente las ocasiones para hacer trabajos prácticos como un parte de los estudios de área, visitando a los países latinoamericanos o el Brasil. Además, la mayoría de las ocasiones son personales y incidentales. Todavía no se establece el sistema permanente del intercambio de los especialistas como entre el Japón y los países desarrollados. Hay unos ejemplos de que unos especialistas disciplinados jóvenes y ardientes quienes aprenden el portugués bien y obtienen los conocimientos sobre el Brasil, no tienen las oportunidades para hacer los trabajos prácticos y por fin, van a estudiar en los centros de los estudios de la América Latina en las universidades norteamericanas.

#### IV CONCLUSIÓN

En los capítulos sobredichos se muestran la situación actual y los problemas de los estudios del Brasil en el Japón desde punto de vista del método de los estudios de área. En cada esfera de las ciencias sociales, además de estos problemas, existirían diversos problemas concretos. Estos problemas no se limitan sólo a los estudios del Brasil, sino a los de otros países latinoamericanos en el Japón. Los especialistas disciplinados de la América Latina tienen interés común en la solución de estos problemas, y recientemente prueban a adelantar los estudios de la América Latina con sus cooperaciones. En septiembre de 1964, se establece la Academia de la Ciencias Sociales de la América Latina, en la cual participan unos sesenta especialistas disciplinados y gradualmente amplifican la actividad con el fin de los intercambios de sus estudios, de los estudios integrados, y de la difusión de los conocimientos sobre la América Latina.

Al considerar la intimidad presente entre el Japón y el Brasil, es natural que los estudios del Brasil en Japón adelanten más notablemente que los de otros países latinoamericanos. En realidad es extraño que por lo menos los estudios del Brasil en las esferas de las ciencias sociales, como he escrito, están en el nivel tal bajo.

Las relaciones del Japón con el Brasil—por ejemplo, la existencia unos 600,000 personas originarias del Japón y las actividades de más de 30 empresas japonesas—son íntimas incomparablemente con las de otros países extranjeros,

Nosotros, los especialistas disciplinados, debemos reflexionar en este punto y esforzar por profundizar los estudios del Brasil en el Japón.

# KOBE ECONOMIC & BUSINESS REVIEW

## CONTENTS

### NO. 1 (1953)

Present Day Significance of Free Ports .....	<i>Ginjiro Shibata</i>
Development of Devaluation-Problem in Post-War Japan.....	<i>Kiyozo Miyata</i>
Japan's Trade with South and South-East Asian Countries .....	<i>Fukuo Kawata</i>
The Exchange Control Policy in Post-War Japan .....	<i>Masahiro Fujita</i>
On the Official Statistics of Foreign Trade in the Post-War Japan .....	<i>Hikoji Katano</i>
On Business History .....	<i>Tadakatsu Inoue</i>
Problems of Regional Industrialization in Japan .....	<i>Minoru Beika</i>
A Research of Wage Income in Post-War Japan .....	<i>Nobuko Nosé</i>
Revaluation in Japan .....	<i>Susumu Watanabe</i>
Last-In, First-Out Inventory Method under the Japanese Tax Law ...	<i>Munehiro Masuzaki</i>

### NO. 2 (1954)

Movements for the Establishment of Free Ports in Japan .....	<i>Ginjiro Shibata</i>
Japan's Trade with Latin America in the Post-War Years .....	<i>Fukuo Kawata</i>
The Maritime Competitions in the Early Meiji Era .....	<i>Seiji Sasaki</i>
Two Deflations in the Showa Era .....	<i>Masahiro Fujita</i>
Estimation of the Effectiveness of Devaluation on Balance of Payment Deficit in Japan .....	<i>Hikoji Katano</i>
The Recovery Method of the Japanese Shipping Industry in Post-War Period .....	<i>Hiromasa Yamamoto</i>
Business Accounting and Tax Accounting .....	<i>Susumu Watanabe</i>
Spatial Characteristics of Industries Relative to Their Business Features .....	<i>Minoru Beika</i>
Stages in Factory Organization .....	<i>Tadakatsu Inoue</i>
Accounting for Fixed Assets Revaluation; Recent Views in Japan ...	<i>Munehiro Masuzaki</i>
On the Structure of the National Income Distribution in Japan .....	<i>Nobuko Nosé</i>

### NO. 3 (1956)

Industrialization and International Trade .....	<i>Fukuo Kawata</i>
Econometric Determination of Foreign Exchange Rate of Japan for 1926-1953 .....	<i>Hikoji Katano</i>
Present Status of Japan's Shipping .....	<i>Ginjiro Shibata</i>
The Distinction between "Shasen" and "Shagaisen" as Historical Concepts in Japanese Shipping.....	<i>Seiji Sasaki</i>
The Banking System in the Middle Meiji Era (1870-1910) .....	<i>Masahiro Fujita</i>
Disposition of Cost Variances in Japanese Tax Law .....	<i>Susumu Watanabe</i>
Structure of Industrial Districts in Japan .....	<i>Minoru Beika</i>
Note on the ZAIBATSU Combines.....	<i>Tadakatsu Inoue</i>
On the Model-Building for Social Accounting Design .....	<i>Nobuko Nosé</i>

### NO. 4 (1957)

The Impact of Exchange Policy on the International Economy of Japan during the Period 1930-1940 .....	<i>Laurence P. Dowd</i>
A Note on the Recent Trends of Japan's Foreign Trade .....	<i>Fukuo Kawata</i>
The Development of Overseas Banking System in Japan in the Meiji Era .....	<i>Masahiro Fujita</i>

More on the Structure of National Income Distribution in Japan .....	<i>Nobuko Nosé</i>
Reconstruction of the Theory of Purchasing Power Parity .....	<i>Hikoji Katano</i>
Tramp Shipping Freights and International Trade .....	<i>Ginjiro Shibata</i>
A Little Study on the Transition from the Sailing Vessel to Steamer in Japan .....	<i>Seiji Sasaki</i>
On the Regulating Policy of Japan Against the Shipping Conference—Especially in Relation to the Refusal of the Entry to New Comers .....	<i>Hiromasa Yamamoto</i>
The Price Fluctuation Reserve System in Japan .....	<i>Susumu Watanabe</i>
Locational Problem in the New Major Branches of Japanese Industries from 1954 to 1956.....	<i>Minoru Beika</i>
Business Problems in an International Situation .....	<i>Tadakatsu Inoue</i>

#### NO. 5 (1958)

History of Yen—Its Developments in the Japanese Economy (1) .....	<i>Hiroshi Shinjo</i>
Fundamental Features of the Accumulation of Capital in the Late Meiji Era.....	<i>Masahiro Fujita</i>
Some Aspects of Japan's Trade with South and South-East Asia, 1950–1957 .....	<i>Fukuo Kawata</i>
Curves of Diminishing Values of Japanese Merchant Ships in Proportion to Their Age .....	<i>Ginjiro Shibata</i>
The Modernization of Japanese Shipping Based on the Transportation of Hokkaido Marine Products .....	<i>Seiji Sasaki</i>
Development of the Marine Insurance Industry in Japan in the Meiji Period ... ..	<i>Hiromasa Yamamoto</i>
A Assimilação do Imigrante Japonês no Brasil .....	<i>Hiroshi Saito</i>
Rate of Profit and International Specialization of Production .....	<i>Hikoji Katano</i>
Replacement Cost and Lifo Cost .....	<i>Susumu Watanabe</i>
Spatial Problems of Business Activities .....	<i>Minoru Beika</i>
The Nature of the Morgan Control .....	<i>Tadakatsu Inoue</i>
On the Effect of Accelerated Amortization for Tax Purposes.....	<i>Nobuko Nosé</i>

#### NO. 6 (1959)

History of Yen—Its Developments in the Japanese Economy (2) .....	<i>Hiroshi Shinjo</i>
The Central Banking Policy in the Meiji Era.....	<i>Masahiro Fujita</i>
Economic Growth, Balance of Payment and Capital Movement .....	<i>Hikoji Katano</i>
World Trade and Japan's Export—1953–1957— .....	<i>Fukuo Kawata</i>
Alguns Aspectos da Mobilidade de Japoneses no Brasil .....	<i>Hiroshi Saito</i>
Problems of Emigrant-Transportation in Japan .....	<i>Hiromasa Yamamoto</i>
Port Labor Conditions in Japan .....	<i>Ginjiro Shibata</i>
The Development of the Concept “Operator” in Japan .....	<i>Seiji Sasaki</i>
Single Industry Towns in Japan .....	<i>Minoru Beika</i>
On the Application of the Social Accounting Principle to Business Accounting .....	<i>Nobuko Nosé</i>
Valuation of Work in Process .....	<i>Susumu Watanabe</i>
Developmental Stages Relating to Theories of Stock-Equity Accounting .....	<i>Ryuji Takeda</i>
On the Rate of Interest in Business Administration .....	<i>Jiro Ono</i>
Various Classes of Data Processing by Means of Electronic Computer .....	<i>Hideo Kitani</i>
Company Histories in Japan .....	<i>Tadakatsu Inoue and Yoshiro Ikushima</i>

#### NO. 7 (1960)

Japanese Emigration and Its Effect on International Payments .....	<i>Ginjiro Shibata</i>
--	------------------------



One-to-One Correspondence Between Goods and Factor Prices .....	<i>Hikoji Katano</i>
The Gold Standard and Banking Capital in Japan.....	<i>Masahiro Fujita</i>
World Trade and Economic Growth .....	<i>Fukuo Kawata</i>
Singularity in the Structure of the Seamen's Union of Japan .....	<i>Hiromasa Yamamoto</i>
Some Reflections on Inter-Comparability of Social Accounting .....	<i>Nobuko Nosé</i>
The Meaning of Inventories .....	<i>Susumu Watanabe</i>
Structure of Income Determination on the Balance Sheet .....	<i>Ryuji Takeda</i>
On the Value of Stock Rights and Its Significance in Corporate Finance .....	<i>Jiro Ono</i>
Business Features and Management Policies of Industrial Enterprises in Local Districts of Japan.....	<i>Minoru Beika</i>

#### NO. 8 (1961)

The Industrial System and Industrial Education in Southeast Asia Now on the Threshold of Reform; and Japan's Position therein .....	<i>Kiyozo Miyata</i>
Industrial Structure and Educational System in India ... ..	<i>Tadao Miyashita</i>
Industrial Education in India .....	<i>Tadao Miyashita</i>
Technical Education in India .....	<i>Tadao Miyashita</i>
Industrial Structure and Vocational Education in Thailand .....	<i>Fukuo Kawata</i>
The Industrial Structure and Industrial Education in the Philippines .....	<i>Tei-ichi Yamasaki</i>
Industrial Structure and Vocational Education in Indonesia .....	<i>Hiromasa Yamamoto</i>

#### NO. 9 (1962)

Problems in Port Administration and Finance in Japan .....	<i>Ginjiro Shibata</i>
Types of Early Modern Japanese Shipowners.....	<i>Seiji Sasaki</i>
On the Employment System of Seamen in Japan .....	<i>Hiromasa Yamamoto</i>
A Study on Japan's Invisible Trade.....	<i>Fukuo Kawata</i>
Problems of Industrial Location relating to Regional Development in Japan .....	<i>Minoru Beika</i>
The System of Inside Contracting .....	<i>Tadakatsu Inoue</i>
A Critique on Professor Mahalanobis Model of Economic Planning in India .....	<i>Hikoji Katano</i>
National Income Concepts: Reconsidered.. ..	<i>Nobuko Nosé</i>
Some Problems of the Installment Basis .....	<i>Susumu Watanabe</i>
On the Purposes of a Going-Concern Valuation and its Natures .....	<i>Jiro Ono</i>
Die Betrachtungsweise der neueren betriebswirtschaftlichen Kostentheorie.....	<i>Tetsuo Kobayashi</i>

#### NO. 10 (1963)

Revised Accounting Provisions of the Commercial Code of Japan —with Special Reference to the Corporation Income Tax Law—... ..	<i>Susumu Watanabe</i>
Social Accounting as an Instrument of Policy .....	<i>Nobuko Nosé</i>
Industrial Estates for Small Businesses in Japan .....	<i>Minoru Beika</i>
Rise of the Mutual Financing Business in Japan .....	<i>Tadakatsu Inoue</i>
The Introduction of European-Style Vessels in Japan: A Historical Survey.....	<i>Seiji Sasaki</i>
On Industrial Relations in Japan's Shipping Industry—with Special Concern on Personnel Management— .....	<i>Hiromasa Yamamoto</i>
Regional Disparities in the Brazilian Economy: A Case Study on the Brazilian Northeast .....	<i>Yoshiaki Nishimukai</i>
The Basic Concepts of Going-Concern Valuation .....	<i>Jiro Ono</i>
A Study on the Current Cost Theory of Fritz Schmidt .....	<i>Isao Nakano</i>

Die Kostenbegriffe für die betriebliche Planung ..... *Tetsuo Kobayashi*  
Introducing Prof. Shinjo's "History of the Yen" ..... *Zentaro Matsumura*

#### NO. 11 (1964)

Accounting Profit and Taxable Income ..... *Susumu Watanabe*  
On Integration in Economic Accounting ..... *Nobuko Nosé*  
Über „Cost Accounting Standards“ in Japan ..... *Tetsuo Kobayashi*  
A Note on the Lohmann-Ruchtli Effect ..... *Isao Nakano*  
Management Approach to Regional Development Problems in Japan ..... *Minoru Beika*  
A Research Report on Office Automation of Middle-Scale Cities in Japan ..... *Jiro Ono*  
Die Geschichte der Privatisierung ..... *Masaya Okada*  
Recent Trends in the Balance of Payments of Japan ..... *Fukuo Kawata*  
Long-Term Finance in Post-War Japan (1) ..... *Masahiro Fujita*  
A Chronological Table of Modern Japanese Shipping—No. 1; 1600~1799 ..... *Seiji Sasaki*  
The Continuous Employment of Seamen in American Shipping  
Industry ..... *Hiromasa Yamamoto*  
Some Problems of the Brazilian Economic Development Plan  
(1963~1965) ..... *Yoshiaki Nishimukai*

#### NO. 12 (1965)

Special Depreciation and Reduced Entry ..... *Susumu Watanabe*  
Electronic Data Processing System in Japan ..... *Minoru Beika*  
A Chronological Table of Modern Japanese Shipping—No. 2,  
1800~1912 ..... *Seiji Sasaki*  
Overseas Operations of Japanese Business Enterprises in Brazil ..... *Tadakatsu Inoue*  
A Note on Economic Accounting for Government Sector ..... *Nobuko Nosé*  
International Liquidity and the Tokyo Meeting of the International  
Monetary Fund ..... *Masahiro Fujita*  
Intersectoral Transaction Table with Endogenous Foreign Trade Sector in  
the Indian Economy: 1955/56 ..... *Hikoji Katano*  
The System of Reserved Members for Seamen before World War II  
—The Employment System of Seamen in Japan— ..... *Hiromasa Yamamoto*  
On the Automation of Banking in Japan ..... *Jiro Ono*  
A Presente Etapa do Desenvolvimento Econômico do Japão ..... *Yoshiaki Nishimukai*  
Kostentheorie und dispositiver Faktor ..... *Tetsuo Kobayashi*  
Grundprobleme der Privatisierung ..... *Masaya Okada*

#### NO. 13 (1966)

Annual Income under the Corporation Income Tax Law ..... *Susumu Watanabe*  
Trade Controls in Occupied Japan (1945~1949) ..... *Fukuo Kawata*  
Patterns of Domestic Shipping Services  
—Characteristics of Japanese Coastwise Shipping— ..... *Seiji Sasaki*  
Approaches to the History of Individual Business Units ..... *Tadakatsu Inoue*  
Cumulated Cost Ratios for the Japanese Economy in 1955 ..... *Nobuko Nosé*  
Accelerated Growth of National Income ..... *Hikoji Katano*  
Technological Development and Labour Relations  
in the Japanese Shipping Industry ..... *Hiromasa Yamamoto*  
Brazilian Position in the Latin American Free Trade  
Association ..... *Yoshiaki Nishimukai*  
Information Specification for Business Management (I)  
—A Case Study— ..... *Jiro Ono*  
Die Privatisierung der Preußag ..... *Masaya Okada*

## KOBE UNIVERSITY ECONOMIC REVIEW 1966

Edited by Faculty of Economics,  
Kobe University, Kobe, Japan

### CONTENTS

A Measurement of Douglas Production Function for Japan's Cotton Industry during the Pre-War Period .....	<i>Hidetaro Iyemoto</i>
A Model of the Farm Problem in a Closed System.....	<i>Osamu Tanaka</i>
Einkommensverteilung und Klassenstruktur .....	<i>Toshimasa Mukai</i>
On the Influence of Tax System upon Capital Accumulation through International Comparison .....	<i>Kazuo Nakamura</i>
Export Base and Infant Export Industries .....	<i>Atsushi Murakami</i>
On Taxation System in Communist China .....	<i>Akira Fujimoto</i>
The Circulation of Commodity and Use of Money in Early Medieval Japan .....	<i>Tetsuo Kamiki</i>

---

## THE ANNALS OF THE SCHOOL OF BUSINESS ADMINISTRATION KOBE UNIVERSITY 1966

Edited by The School of Business Administration,  
Kobe University, Kobe, Japan

### CONTENTS

Accounting of Allowance for Lost Cost-Valuation at the Lower of Cost or Market Reconsidered— .....	<i>Katsuji Yamashita</i>
Minimization of the Rates of Public Enterprises .....	<i>Tatsuo Takenaka</i>
Studies in the Problems of Medium and Small Industries in Japan .....	<i>Noboru Inaba</i>
Über die Ökonomische Bewertung der Investition im Verkehr .....	<i>Kazuo Akiyama</i>
Neuere Entwicklungen in der Grenzplankostenrechnung .....	<i>Tetsuo Kobayashi</i>
Der handelsrechtliche Jahresabschluß der japanischen Aktiengesellschaft .....	<i>Masatoshi Kuroda</i>

---

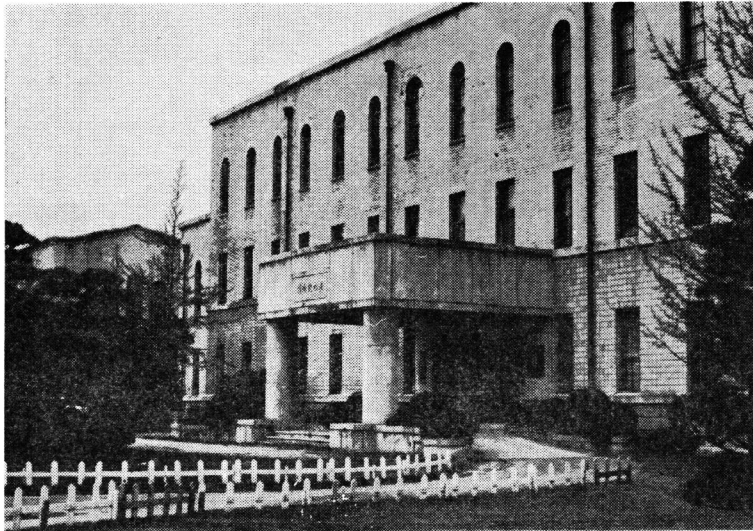
## KOBE UNIVERSITY LAW REVIEW

International Edition 1965  
Edited by Faculty of Law,  
Kobe University, Kobe, Japan

### CONTENTS

Japan's Private International Law in its Making: A Historical Review .....	<i>Taro Kawakami</i>
Attualità del diritto marittimo giapponese .....	<i>Hiroshi Kubota</i>
Codice della Casa dei minorenni L. 15 luglio 1948, n. 169 .....	<i>Hiroshi Kubota</i>
Aktienwesen nach dem geänderten japanischen Handelsgesetz .....	<i>Ichiro Kawamoto</i>

## THE RESEARCH INSTITUTE FOR ECONOMICS AND BUSINESS ADMINISTRATION, KOBE UNIVERSITY



### HISTORICAL SKETCH

In 1919, a research organization named the Institute for Commerce was founded in Kobe Higher Commercial School, one of the chief predecessors of Kobe University, with a gift made by F. Kanematsu & Company, a leading mercantile firm in Kobe. The organization was designed to carry on and facilitate integrated research on business and commerce and to formulate and publish the results of these studies and investigations in such form as to make them available to the business community.

With the founding of Kobe University of Commerce, successor of Kobe Higher Commercial School, in 1929, the Institute extended its research activities by adding several divisions. One was the famous Latin-American Library, which soon became the center of research in this field in Japan. A room for statistics equipped with various computing machines was established and began publication of "Juyo Keizai Tokei" monthly and "Sekai Boeki Tokei" annually. A filing room was prepared to deposit press clipping files systematically arranged by topics and dates. Another room was designed to become the center of all possible original records and data having to do with the beginning and progress of Japanese business.

On the campus of Kobe University of Commerce, another organization named the Institute for Business Mechanization was founded in 1941 utilizing

business machines donated by the IBM Corporation and others. With Professor Yasutaro Hirai as its head a broad and forward-looking plan for business mechanization in Japan was developed.

In 1944, Kobe University of Commerce changed its name to Kobe University of Economics. After the war, however, the University was consolidated with three other colleges in Hyogo Prefecture to become Kobe University. With this development, the two Institutes were also amalgamated into the Research Institute for Economics and Business Administration, Kobe University. At present, the Institute, with its seventeen full-time professional staff members, carries on studies and investigations in international economy, business administration, and business mechanization in Japan.

## LOCATION AND BUILDINGS

The Research Institute for Economics and Business Administration is located on the campus of Kobe University, Rokko, Kobe. It is a three-story building named the Kanematsu Kinenkan and has a floor space of about 2,900 square meters, which includes a president's room, forty-one offices, six rooms used as a library, a room for statistics, three conference rooms, etc. Adjoining is a one-story building recently built to install business machines.

## ORGANIZATION

Under the directorship of a president, the Institute operates with two research groups one of which consists of five sections while the other has four sections. Each research group and its sections are as follows :

### **A Group of International Economy**

- (1) International Trade
- (2) Economy of Latin-America
- (3) Maritime Economy
- (4) International Finance
- (5) International Law of Economy

### **B Group of Business Administration**

- (1) Business Administration and Business Mechanization
- (2) Accounting
- (3) International Management
- (4) Labor Problems

Besides the regular work of the Institute organized in this manner,

research committees may be created to carry on any special work requiring the joint study of academic and business circles. At present, there are three committees, that is, the Finance Committee, Latin-America Committee, and International Economy Committee.

For convenience and greater efficiency in carrying out its research activities, the Institute has a general office which is responsible for, 1) the collection and preservation of a comprehensive collection of books, periodicals, pamphlets, and original records and data of finance, trade, commerce, industry and business generally; 2) the classification, cataloguing, indexing, arranging, annotation and compilation of these research materials; and 3) the formulation and publication of the results of the investigations and studies accomplished by the professional staff members of the Institute.

As an affiliated institute, the Documentation Center for Business Analysis has been recently established. It is the first systematic information facility in the field of business administration in Japan that has been recognized and authorized by the Ministry of Education. The purpose is to collect and to make intensive control of all kinds of materials on business administration and to make them available to scholars, universities, governments, and business world with the aid of modern documentation techniques.

THE RESEARCH INSTITUTE FOR  
ECONOMICS & BUSINESS ADMINISTRATION  
KOBE UNIVERSITY

Director: Minoru BEIKA  
Secretary: Hirotake SAKAI

GROUP OF INTERNATIONAL  
ECONOMIC RESEARCH

Fukuo KAWATA	Professor of International Trade Dr. of Economics
Seiji SASAKI	Professor of Maritime Economy Dr. of Economics
Taro KAWAKAMI	Professor of Private International Law Dr. of Law
Jiro YAO	Professor of International Finance Dr. of Economics
Masahiro FUJITA	Associate Professor of Regional Study on Latin America
Hikoji KATANO	Associate Professor of International Trade
Hiromasa YAMAMOTO	Associate Professor of Maritime Economy
Yoshiaki NISHIMUKAI	Associate Professor of Re- gional Study on Latin America

GROUP OF BUSINESS  
ADMINISTRATION RESEARCH

Susumu WATANABE	Professor of Accounting Dr. of Business Administration
Minoru BEIKA	Professor of Business Administration and Business Mechanization Dr. of Business Administration
Tadakatsu INOUE	Professor of International Management
Nobuko NOSÉ	Associate Professor of Accounting Dr. of Business Adminis- tration
Jiro ONO	Associate Professor of Business Administration and Business Mechani- zation
Hideki YOSHIHARA	Research Associate of International Manage- ment

Office: The Kanematsu Memorial Hall,  
THE KOBE UNIVERSITY  
ROKKO, KOBE, JAPAN